CURRICULA

2020

Senior Secondary Course
Curriculum updation is a continuous process in learning and hence NIOS brings out revised curricula periodically. It is obligatory for the AIs and the learners of a particular block and session of a particular year to follow the syllabi and the SLMs prescribed by it for the year. All concerned are, therefore, strongly advised to purchase the curriculum prescribed for the year concerned from NIOS HQ or its Regional Centres for information and use.
Preface

I welcome you for choosing the National institute of Open Schooling (NIOS) as your preferred option for continuing your studies. You will find that NIOS is an institution with a difference: it is an open school which encourages flexibility and freedom to learn. By joining NIOS, you become a part of the largest open schooling system in the world.

NIOS is one of the three National Boards of Secondary Education and offers school education through open and distance learning (ODL) mode. It has been vested with the authority to enroll, examine and certify learners up to pre-degree level. The open schooling courses of study of NIOS have the same standard and equivalence as the course of the study of other national/ state level boards of school education. NIOS develops its own curriculum; self learning material and media support programmes utilizing expertise of faculty from various academic and vocational education institutions/ organizations.

NIOS offers 35 subjects (including 18 languages) at the secondary stage in ten Regional languages (Hindi, English, Urdu, Gujarati, Marathi, Telugu, Malayalam, Tamil, Punjabi and Odia) and in 41 subjects (including 12 languages) at the senior secondary stage in six mediums (Hindi, English, Urdu, Bengali, Gujarati and Odia). You can choose subjects according to your interest, need and vision of career path.

In the interest of learners, National institute of Open Schooling (NIOS) regularly undertakes a revision and updation of its courses on a regular basis. It is important that the latest information is made available to the learners about the curriculum in various subjects. To achieve this objective, curricula of all academic subjects at both the secondary and the senior secondary levels has been compiled and published in the form of a Compendium. This shall also serve as a guide for all future course revisions for in-house faculty and for all who are associated with NIOS. Any suggestions for further improvement are welcome.

Let me wish you all a happy and successful future.

Chairman, NIOS
Preface

Teaching and learning in open and distance education is mostly delivered by the Self Learning Material (SLM). Since these materials deliver the content it should be well presented and prepared. Keeping the national priorities, contemporary concerns and the target groups in view, it has been a continuing endeavour on the part of the National Institute of Open Schooling (NIOS) to deliver its best to learners who are generally older than school going children and many of whom are already in different vocations. The curriculum for such groups has to be more focused, need based, relevant, utilitarian as also addressing the concerns of the coming century. Moreover, inclusion of new technologies is providing completely new ways of thinking about the delivery of the curriculum. This has been accepted as a creed by us at the National Institute of Open Schooling.

The present curricula have been undertaken with these aims in view. Tutor Marked Assignments has been given weightage. The coverage in the examination is based on the entire syllabi and do not exclude any part of the content. Entire course content has been put together for ready reference for the learners, tutors, and other stakeholders. The effort has been mostly in-house and the concerned subject officials involved deserve thanks for the same. Publication unit has taken upon it the responsibility of bringing out editions of the same in a short time. Their effort is commended.

Major responsibilities of transacting the curricula, however, rest upon the Coordinators and Teachers/ Tutors at the Study Centres. We trust that this compendium would help learners and will be useful for them to look into their curricula at one go.

Director (Academic)
<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Subject</th>
<th>Code</th>
<th>Page. No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hindi</td>
<td>301</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>English</td>
<td>302</td>
<td>14</td>
</tr>
<tr>
<td>3.</td>
<td>Bengali</td>
<td>303</td>
<td>21</td>
</tr>
<tr>
<td>4.</td>
<td>Tamil</td>
<td>304</td>
<td>23</td>
</tr>
<tr>
<td>5.</td>
<td>Odia</td>
<td>305</td>
<td>28</td>
</tr>
<tr>
<td>6.</td>
<td>Urdu</td>
<td>306</td>
<td>35</td>
</tr>
<tr>
<td>7.</td>
<td>Gujarati</td>
<td>307</td>
<td>38</td>
</tr>
<tr>
<td>8.</td>
<td>Sanskrit</td>
<td>309</td>
<td>44</td>
</tr>
<tr>
<td>9.</td>
<td>Punjabi</td>
<td>310</td>
<td>53</td>
</tr>
<tr>
<td>10.</td>
<td>Mathematics</td>
<td>311</td>
<td>63</td>
</tr>
<tr>
<td>11.</td>
<td>Physics</td>
<td>312</td>
<td>72</td>
</tr>
<tr>
<td>12.</td>
<td>Chemistry</td>
<td>313</td>
<td>81</td>
</tr>
<tr>
<td>13.</td>
<td>Biology</td>
<td>314</td>
<td>94</td>
</tr>
<tr>
<td>14.</td>
<td>History</td>
<td>315</td>
<td>101</td>
</tr>
<tr>
<td>15.</td>
<td>Geography</td>
<td>316</td>
<td>106</td>
</tr>
<tr>
<td>16.</td>
<td>Political Science</td>
<td>317</td>
<td>114</td>
</tr>
<tr>
<td>17.</td>
<td>Economics</td>
<td>318</td>
<td>120</td>
</tr>
<tr>
<td>18.</td>
<td>Business Studies</td>
<td>319</td>
<td>127</td>
</tr>
<tr>
<td>19.</td>
<td>Accountancy</td>
<td>320</td>
<td>135</td>
</tr>
<tr>
<td>20.</td>
<td>Home Science</td>
<td>321</td>
<td>146</td>
</tr>
<tr>
<td>21.</td>
<td>Psychology</td>
<td>328</td>
<td>157</td>
</tr>
<tr>
<td>22.</td>
<td>Computer Science</td>
<td>330</td>
<td>162</td>
</tr>
<tr>
<td>23.</td>
<td>Sociology</td>
<td>331</td>
<td>168</td>
</tr>
<tr>
<td>24.</td>
<td>Painting</td>
<td>332</td>
<td>173</td>
</tr>
<tr>
<td>25.</td>
<td>Environmental Science</td>
<td>333</td>
<td>183</td>
</tr>
<tr>
<td>26.</td>
<td>Mass Communication</td>
<td>335</td>
<td>193</td>
</tr>
<tr>
<td>27.</td>
<td>Data Entry Operations</td>
<td>336</td>
<td>198</td>
</tr>
<tr>
<td>28.</td>
<td>Tourism</td>
<td>337</td>
<td>206</td>
</tr>
<tr>
<td>29.</td>
<td>Introduction to Law</td>
<td>338</td>
<td>212</td>
</tr>
<tr>
<td>30.</td>
<td>Library and Information Science</td>
<td>339</td>
<td>217</td>
</tr>
<tr>
<td>31.</td>
<td>Arabic</td>
<td>341</td>
<td>222</td>
</tr>
<tr>
<td>32.</td>
<td>Persian</td>
<td>342</td>
<td>225</td>
</tr>
<tr>
<td>33.</td>
<td>Malayalam</td>
<td>343</td>
<td>228</td>
</tr>
<tr>
<td>34.</td>
<td>Veda Adhyayan</td>
<td>345</td>
<td>236</td>
</tr>
<tr>
<td>35.</td>
<td>Sanskrit Vyakarana</td>
<td>346</td>
<td>243</td>
</tr>
<tr>
<td>36.</td>
<td>Bharatiya Darshan</td>
<td>347</td>
<td>250</td>
</tr>
<tr>
<td>37.</td>
<td>Sanskrit Sahitya</td>
<td>348</td>
<td>258</td>
</tr>
<tr>
<td>38.</td>
<td>Physical Education and Yog</td>
<td>373</td>
<td>266</td>
</tr>
<tr>
<td>39.</td>
<td>Military Studies</td>
<td>374</td>
<td>272</td>
</tr>
<tr>
<td>40.</td>
<td>Military History</td>
<td>375</td>
<td>276</td>
</tr>
<tr>
<td>41.</td>
<td>Early Childhood Care and Education</td>
<td>376</td>
<td>280</td>
</tr>
<tr>
<td>42.</td>
<td>Committees of Courses</td>
<td></td>
<td>287</td>
</tr>
</tbody>
</table>
Learning Through Open Schooling

1. Introduction

Education is the only tool to empower persons and make them capable enough to live productive lives particularly in this era of technological advancements and World Wide Web. It enables an individual to cope with the challenges posed by world of work and life at large. Education through open and distance system is perhaps the only way to reach out to a large number of people who cannot pursue their academic and professional skills because of geographical, physical and time constraints. Open and distance learning has been recognised as one of the ways for individuals to pursue skills, become empowered and contribute to social and economic development of the country.

With the advent of multimedia and internet based learning solutions, open and distance learning has acquired new meaning. To its root, it is the system of education that aims at providing access to education to anyone despite constraints of time, place, pace or other reasons.

With this philosophy, National Institute of Open Schooling, NIOS offers flexible learning opportunities to learners to learn according to their own interests, capacity and capability.

2. Open Schooling system

NIOS is a recognised National Board with cumulative enrolment of 2.78 million (for last 5 years) providing quality education through a network of 20 Regional Centres, two Sub Regional Centres and more than 6620 Study Centres (AIs/AVIs) spread all over the country and abroad. The use of multiple channels of communication such as self-learning print material and audio and video capsules as supplementary material makes the process of learning interesting and engaging.

To provide an opportunity to learners to interact with each other and with the tutor, Personal Contact Programmes are organised at the study centres. With an aim to reach out to the maximum learners, Mukta Vidya Vani programmes (Audio streaming through internet on NIOS website) are live webcast where anyone can access quality interaction on the subject matter and related themes. The learners can participate and ask their questions which are duly addressed. With the effective use of technology, Community Radio programmes (FM 91.2 MHz) of NIOS are also used to sensitise people about general topics related to community health, adolescence education, etc.

3. Flexibilities in Open Schooling

Flexibility is the key feature of the open schooling system. The NIOS provides flexibility with respect to:

3.1 Age limit: There is no upper age limit for admission. However, the minimum age for enrolment is 14 years for the Secondary course and 15 years for the Senior Secondary course.
3.2 **Choice of subjects**: Learners can choose subjects of their choice from a number of subjects. NIOS offers 11 subjects and 17 languages at secondary level and 20 subjects and 9 languages at senior secondary level.

3.3 **Choice in medium of instruction**: Self learning material is provided in different languages. Learners can choose from:

- Hindi, English, Urdu, Marathi, Telugu, Gujarati, Malayalam, Tamil, Punjabi and Odia mediums at the Secondary stage.
- Hindi, English, Urdu, Bengali, Gujarati and Odia mediums at the Senior Secondary stage.

**Additional subjects**: Learners can also select one or two additional subject(s) either at the time of admission or during the course of study, but not more than seven subjects in all.

**Change of subject**: During the admission period of five years, learners can change one or more subject(s), provided the total number of subjects does not exceed seven. Subject(s) already passed by a learner cannot be changed.

3.6 **Credit accumulation**: Learners can choose to appear in any one or more subjects in any examination and earn credit which will be accumulated till all five subjects required for certification are successfully completed within a period of 5 years of registration.

3.7 **Transfer of credit**: NIOS allows transfer of credits of up to two subjects passed from National and State Boards of Examination / State Open Schools with whom NIOS has entered into an agreement.

3.8 **Combination of Academic and Vocational subjects**: A number of vocational subjects are also offered in combination with academic subjects at the Secondary and the Senior Secondary level.

3.9 **Examination**: The Public Examinations are held twice in a year. Learners can take any examination during this period as and when they are well prepared.

3.10 **On Demand Examination**: Learner can also appear through the On-Demand Examination System (ODES) of NIOS at the Secondary and the Senior Secondary levels. This facility is available at the NIOS Headquarter, NOIDA and at most Regional Centres of NIOS.

4. **Scheme of studies**

1. **Secondary course** The learner needs to study five subjects with one or maximum two languages and remaining other subjects as per choice. Each subject carries 100 marks; in subjects with practicals, the weightage accorded is theory-85%, practical-15%.

2. **Senior Secondary course** The learner needs to study five subjects with either one or
maximum two languages and the remaining subjects as per choice. Each subject carries 100 marks. For subjects with practicals, the weightage accorded is theory-80%, practical-20%.

3. **Internal/Formative assessment through Tutor Marked Assignments (TMA):** Tutor are an integral part of the learning process. In order to check the progress during the course of study, the learners are required to attempt and submit the same. Tutor Marked Assignments in secondary and senior secondary examination carry 20% weightage of theory marks in the external examination which are reflected in the marksheet. These marks are added to the marks obtained in external theory examination.

5. **Certification**

For obtaining a pass certificate, learners are required to pass in a minimum of five subjects including one or maximum of two languages.
भूमिका

हिंदी देश में सबसे अधिक लोगों द्वारा बोली जाने वाली भाषा है तथा यह संपर्क-भाषा और कामकाजी भाषा के रूप में भी प्रयुक्त होती है। इस भाषा का इतिहास लगभग 1000 ईसवी से शुरू होता है और एक लंबे अंतराल में इसमें अनिरंत रचनाओं की सृष्टि की गई और इसकी वैज्ञानिकता सर्वमान्य रही। इसमें रचनात्मक और साथ ही जान के साहित्य का विशाल भंडार है। अतः विषय के रूप में हिंदी भाषा का अध्ययन महत्त्वपूर्ण हो जाता है।

औचित्य

दसवीं कक्षा तक विद्यार्थी भाषा का आधारभूत ज्ञान प्राप्त कर लेता है, किंतु उच्चतर माध्यमिक स्तर पर भाषा के विविध प्रयोगों का गहन अध्ययन और उपयोग आवश्यक है।

यह पाठ्यक्रम विद्यार्थियों के विभिन्न उद्देश्यों की पूर्ति करता है, जैसे इस पाठ्यक्रम में साहित्य और भाषा का समन्वय किया गया है जिससे विद्यार्थी एक और दैनिक जीवन और आजीविका के लिए भाषा का व्यावहारिक ज्ञान प्राप्त कर सकें और दूसरी ओर हिंदी भाषा तथा साहित्य का उच्चतर अध्ययन कर पाने के योग्य बन सकें।

पूर्व अपेक्षाएँ

इस पाठ्यक्रम में प्रवेश से पहले विद्यार्थी से अपेक्षा की जाती है कि वह सुनना, बोलना, पढ़ना और लिखना कोशिश से संबंधित अभ्यासित योग्यताएँ प्राप्त कर चुके होंगे-

- भाषा के व्यावहारिक और साहित्यिक रूपों का अर्थधारण।
- कथन और वर्णन की क्षमता।
- जीवन मूल्यों की पहचान।
- तात्कालिक, आरंभिक और उत्तराधिकार क्षेत्रों के बारे में समन्वय।
- बोलने और लिखने में व्यावहारिक समन्वय भाषा का उपयोग।

उद्देश्य

सामान्य उद्देश्य
इस पाठ्यक्रम को पूरा करने के बाद आप:

- भाषिक और साहित्यिक योग्यता का विकास कर उनका प्रयोग-उपयोग कर सकेंगे;
- हिंदी की व्याकरण-सम्पत्ति, समाज-संदर्भित और व्यावहारिक अभिव्यक्ति का विकास कर सकेंगे;
- हिंदी की साहित्यिक-सामाजिक संवेदना की समझ और उसे परंपरा से जोड़ कर प्रस्तुत कर सकेंगे;
- साहित्यिक, प्रयोजनपरक और व्यावहारिक भाषा के विविध रूपों की तुलना कर सकेंगे;
- राष्ट्रीय भावधारा और राष्ट्रीय समस्याओं की पहचान कर उनका उल्लेख कर सकेंगे।

विशिष्ट उदेश्य

इस पाठ्यक्रम को पूरा करने के बाद आप:

- हिंदी भाषा के स्वरूप का ज्ञान प्राप्त कर सकेंगे;
- रोजमर्रा की जिंदगी में मौजूद भाषा का उपयुक्त उपयोग कर सकेंगे;
- किसी पठित या अपठित उद्वेद की तरक समझ सहित व्यक्ति का उल्लेख कर सकेंगे;
- निर्धारित रचनाओं के कथ्य और भाषा की विशेषताओं को रेखा-एकित कर सकेंगे;
- न्यून गद्य साहित्य की विभिन्न विधाओं के स्वरूप की पहचान कर उनका वर्णन कर सकेंगे;
- शिल्प-अपठित अंश का व्यावहारिक गद्य की सराहना करने उन पर हिस्सा कर सकेंगे;
- व्याकरणिक तथा सामाजिक संदर्भों के अनुसार संशोधन-परक भाषा का उपयोग कर सकेंगे;
- हिंदी साहित्य के इतिहास की जानकारी हासिल कर उनका उल्लेख कर सकेंगे;
- प्रयोजन-परक भाषा का ज्ञान प्राप्त कर उनका उपयोग कर सकेंगे;
- संचार तथा प्रोत्साहितवादी अथवा विज्ञान के क्षेत्र में प्रयुक्त विशिष्ट भाषा का उल्लेख कर सकेंगे।

क्षेत्र तथा रोजगार के अवसर

इस विषय में रोजगार के अनेक अवसर उपलब्ध है, जिनमें से कुछ इस प्रकार हैं:

- विद्यालयी शिक्षण
- महाविद्यालयी शिक्षण
- विश्वविद्यालयी शिक्षण
- पत्रकारिता
• जनसंचार
• अनुवाद
• मीडिया इत्यादि

शैक्षणिक योग्यता: दसवीं उत्तरीण

अध्ययन का माध्यम: हिंदी

पाठ्यक्रम की अवधि:

<table>
<thead>
<tr>
<th>पाठ्यक्रम के भाग</th>
<th>अंक: 85</th>
<th>समय (घटे में)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. कृत्रिम</td>
<td>85</td>
<td>210</td>
</tr>
<tr>
<td>क. सुनना</td>
<td>00</td>
<td>10</td>
</tr>
<tr>
<td>ख. बोलना</td>
<td>00</td>
<td>10</td>
</tr>
<tr>
<td>ग. पढ़ना</td>
<td>47</td>
<td>90</td>
</tr>
<tr>
<td>घ. लिखना</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(प्रयोजनमूलक भाषा)</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>ड. व्यावहारिक त्याग</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>2. सैक्टिपिक</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>क. सूचना प्रौद्योगिकी और हिंदी</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ख. विज्ञान की भाषा - हिंदी</td>
<td></td>
<td></td>
</tr>
<tr>
<td>कुल योग</td>
<td>100</td>
<td>240</td>
</tr>
</tbody>
</table>

(टिप्पणी: सुनना और पढ़ना कौशल द्वारा अर्थव्यवस्था होता है, जबकि बोलना और लिखना कौशल अभिनवण्डत के साधन हैं।)

पाठ्यक्रम का विवरण

1. कृत्रिम
   - (क) सुनना व (ख) बोलना
पूर्वजान: भाषा के सुनकर अर्थ निकालने के साथ ही बोलने का सामान्य व्यवहारिक जान।

शिक्षण बिंदु
1. हिंदी ध्वनियों का शुद्ध उच्चारण
2. उच्चारण-संबंधी प्रमुख नियमों का जान
3. कविता का भावानुकूल पठन, करण, हास्य, वीर आदि।
4. स्वर-लहर से युक्त ववक्तव्य, भाषण, वाद-विवाद, साक्षात्कार, समूह में चर्चा-परिचय, कार्यक्रम संचालन, अभिनय, वाचन आदि का अभ्यास।

(ग) पढ़ना

अंक: 47  समय: 90 घंटे

कविता पठन

लक्ष्य: इस इकाई का लक्ष्य विद्यार्थियों को हिंदी-कविता का महत्त्व बताना है। इस इकाई को पढ़कर विद्यार्थियों को प्राचीन काल से लेकर अब तक की कविता के विभिन्न रूपों, प्रमुख कवियों आदि का परिचय प्राप्त कराए और हिंदी के प्रतिनिधित्व कवियों की रचनाओं का अध्ययन कराए। इससे विद्यार्थियों को संवेदनशीलता बढ़ाने और भाषा-शैली समृद्ध होगी।

पूर्वजान: हिंदी के कुछ प्रतिनिधित्व कवियों और उनकी गृहम्य रचनाओं का सामान्य परिचय।

शिक्षण बिंदु हिंदी कविता की निम्नलिखित इकाईयों का अध्ययन अपेक्षित है

हिंदी कविता का विकास

कविता कैसे पढ़े - पठित-अपठित

1. रैदास
2. भीमेंद्रसिंह बाई
3. तुलसीदास
4. रहीम
5. बिहारी
6. पद्माकर
7. सुरेंद्रकांत चिपाठी निराला
8. महादेवी वर्मा
9. समधारी सिंह दिनकर
10. गजानन माधव मुक्तिबोध
11. राजेंद्र उपाध्याय

रस, छंद, अलंकार

रसः भक्ति, शांति, शृंगार वीर
छंदः दोहा, चोपाई, सत्त्व, बरवे, कवित्त, पद, मुक्तक छंद
अलंकारः उपमा, रूपक, रप्तांत, अनुप्रास, अतिशयोक्ति, संदेह, उत्तेक्ष, भाविमान, यमक, श्लेष,
विशेषण विपर्यय, वक्रोक्ति।
अन्यः प्रसीक, बिब-विधान।

योग्यता विस्तार
1. हिंदी साहित्य के इतिहास में कविता के विकास-क्रम का अध्ययन।
2. पाद्यक्रम में निर्धारित कवियों की अन्य कविताओं का अध्ययन।
3. पाद्यक्रम के अतिरिक्त अन्य कविताओं का अध्ययन।
4. समसामयिक पत्र-पत्रिकाओं में प्रकाशित कविताओं का बोधपूर्वक पठन

गद्य का पठन

अंक: 18 समय: 40 घंटे
लक्ष्य: इस इकाई का लक्ष्य विद्यार्थी को गद्य भाषा के विविध रूपों, शैलियों और भंगिमाओं का परिचय देना है। विद्यार्थी गद्य की विविध विधाओं का परिचय प्राप्त करके अपने भाषानीजान को समृद्ध और सक्षम बना सकेंगे और उसका व्यावहारिक जीवन में उपयोग कर सकेंगे।

पूर्वजान: गद्य साहित्य के प्रतिनिधि रचनाकारों की रचनाओं का सामान्य ज्ञान।

शिक्षक बिंदु

गद्य साहित्य का विकास

gद्य कैसे पढ़े (अपठित गद्य)

हिंदी गद्य के प्रतिनिधि रचनाकार
1. आचार्य रामचंद्र शुक्ल - क्रोध (भावात्मक निबंध)
2. हजारीप्रसाद द्विवेदी - कृतज (ललित निबंध)
3. कन्हैयालाल मिश्र प्रभाकर - एक था पेड़ और एक था ढुंढ (चित्तल)
4. कहानी - दो कलाकार (मल्लू श्रेष्ठ); अनुराधा (पंकज विष्ट)
5. व्यंग्य - पीठियाँ और गिंगियाँ (हरिशंकर परिसारी)
6. संपादकीय - अनपठ बनाए रखने की साजिश (राजेंद्र यादव)
7. यात्रा वृत्तांत - आखिरी चट्टान (मोहन राकेश)
8. संस्मरण - जिज्ञासिका की विजय (केलाश चंद्र भाटिया)

उपन्यास का अध्ययन

अंक: 08 समय: 25 घंटे

लक्ष्य: इस इकाई का लक्ष्य विद्यार्थियों में विविध प्रकार के पठन कौशल विकसित करना है, जैसे तीव्र पठन, लंबी सामग्री का पठन और बोधन।

पूर्वजान: लंबी गद्य सामग्री के पठन की सामान्य योग्यता

शिक्षण बिंदु: उपन्यास पठन तथा वृद्धावन लाल बर्मा के 'विराट नहीं' नामक उपन्यास का अध्ययन।

1. उपन्यास पठन के सूत्र
2. उपन्यास के तत्त्व
3. विराट की पत्नियाँ (वृंदावनलाल वभमी) का विश्लेषणात्मक अध्ययन।

योग्यता विस्तार
1. गद्दु साहित्य के संक्षिप्त इतिहास का अध्ययन।
2. सामाजिक पत्र-पत्रिकाओं की विश्लेषन रचनाओं का पठन।
3. अन्य निबंधों, उपन्यासों या कहानियों का पठन और अध्ययन।

(घ) लिखना

अंक: 28  समय: 70 घंटे

(ङ) प्रयोजनमूलक भाषा का औचित्य

सरकार की नीति के अनुसार कार्यालयी हिंदी सरकारी कार्यालयों बैंकों और व्यावसायिक संस्थाओं में उपयोग में लाई जाती है। सरकारी कामकाज में प्रयुक्त हिंदी सामान्य बोलचाल की हिंदी से कुछ भिन्न होती है। इस पाठ्यक्रम को पढ़ने के बाद विद्यार्थी सरकारी कार्यालयों में प्रयुक्त हिंदी का व्यावहारिक ज्ञान प्राप्त कर सकेंगे।

लक्ष्य: इस इकाई का लक्ष्य विद्यार्थी में लेखन कौशल का विकास करना है जिससे विद्यार्थी जोधन में विश्लेषण अवसरों पर अपेक्षित लेखन-कार्य प्रभावी ढंग से कर सकें तथा प्रयोजनमूलक लेखन का उपयोग कर सकें।

पूर्वज्ञान: सही वाक्य लेखन का ज्ञान और विचारों को लिखित रूप में अभिव्यक्ति करने की क्षमता तथा हिंदी भाषा का सामान्य ज्ञान।

शिक्षार्थी बिंदु

अभिव्यक्तिपरक लेखन
1. लिखें कैसे (साहित्यिक, सार्जनात्मक तथा प्रयोजनमूलक कार्यालयी)
2. सार-संक्षेपण (साहित्यिक तथा कार्यालयी)
3. भाव-पल्लव
4. निबंध-लेखन (वर्णनात्मक, भावात्मक और वैचारिक)
प्रयोजनपर्क लेखन

5. पत्र-लेखन (व्यक्तिगत, व्यावहारिक, व्यावसायिक तथा कार्यालयी पत्राचार)

6. तालिका, आरेख, पाइ-चार्ट आदि का निर्माण

7. कार्यालय जापन तथा कार्यालय आदेश

8. प्रतिलिपदेश, टिप्पणी तथा प्रारूपण

9. प्रशासनिक शब्दावली और वाक्यांश

सूजनात्मक लेखन

संस्मरण लेखन, डायरी लेखन

योग्यता विस्तार

दैनिक जीवन में लेखन का अधिक से अधिक उपयोग, जैसे - समाचार पत्र-पत्रिकाओं में अपनी प्रतिक्रियाएँ लिखकर भेजना, मित्रों को पत्र लिखना, अपनी डायरी लिखना, यात्रा का वर्णन अपने मित्रों को लिख कर भेजना आदि।

(इ) भाषा-प्रयोग और व्यावहारिक व्यक्तरण

अंक: 10 समय: 40 घंटे

लक्ष्य: इस इकाई का लक्ष्य विद्यार्थी को व्यक्तरण के नियमों और भाषा के स्वरूप से परिचित कराना है जिससे विद्यार्थी भाषा के स्वरूप से सही-सही निर्देश प्रतिविद्यालय के दैनिक जीवन में उसका आत्मविश्वास पूर्वक उपयोग कर सके।

पूर्वजान: व्यक्तरण के आधारभूत नियमों का ज्ञान।

इकाई

1. मानक भाषा और प्रचलित शैलीगत उपयोग

2. लिखित और उच्चरित भाषा उपयोग

3. उच्चारण (बलाघात, अनुलोक आदि)

4. शब्द परंपरा (शब्द निर्माण, शब्द शक्ति आदि)

5. शब्द भेद (संज्ञा, सर्वनाम, विशेषण, क्रिया आदि)
6. क्रियापदबंध
7. वाक्य-संरचना
8. मुहावरे, लोकोक्तियाँ
9. तकनीकी शब्दावली
10. हिंदी की विभिन्न शैलियाँ (प्रयोजनमूलक, क्षेत्रीय आदि)

योग्यता विस्तार
सामाजिक व्यवहार में भाषा का सार्थक और प्रभावी उपयोग

(च) सूचनात्मक लेखन/चित्रन-मानन
अंक: 02 समय: 15 घंटे
लक्ष्य: इस इकाई का लक्ष्य विद्यार्थीं में विचार प्रक्रिया को जागृत करना है जिससे विद्यार्थी मौखिक और लिखित अभिव्यक्तियों को ध्यान कर अपना मत-अभिव्यक्त प्रकट करने में समर्थ हो सके।
पूर्वज्ञान: सामान्य स्तर की मौखिक और लिखित अभिव्यक्तियों का अर्थग्रहण।
टिप्पणी: इस विषय पर अतिरिक्त सामग्री न देकर प्रस्तुत पाठों के साथ समेकित पठन सामग्री प्रदान की जा रही है।

योग्यता विस्तार
दैनिक जीवन से संबंधित विभिन्न विषयों पर विश्लेषणात्मक, संश्लेषणात्मक और मूल्यांकनपरक विचारों की प्रस्तुति।

(छ) परियोजना लेखन समय: 15 घंटे
लक्ष्य: इस इकाई का लक्ष्य विद्यार्थीं में खेल-खेल में हिंदी भाषा तथा उसके विविध क्षेत्रों के अध्ययन के प्रति रुचि रूप दिखाना है।
पूर्वज्ञान: सामान्य ज्ञान के स्तर की छोटी-छोटी परियोजनाएँ बनाने का अनुभव।
शिक्षण बिंदु: पाठ्यक्रम संबंधी विविध क्षेत्रों पर आधारित परियोजनाओं का निर्माण।
शुद्ध ज्ञान आधारित
व्यावहारिक परियोजना

परियोजना लेखन की प्रक्रिया

योग्यता विस्तार: भाषा के विशेषणात्मक कौशलों की प्रक्रिया का दैनिक जीवन में उचित उपयोग तथा विचारों को हुई सामग्री की व्यवस्थित रूप से प्रस्तुति।

2. वैकल्पिक

अंक: 15  समय: 30 घंटे

उच्चतर माध्यमिक स्तर पर हिंदी भाषा को अधिक व्यावहारिक बनाने के उद्देश्य से विद्यार्थियों के लिए दो विकल्प दिए जा रहे हैं। ये हैं,

(क) सूचना प्रौद्योगिकी और हिंदी
(ख) विज्ञान की भाषा- हिंदी

विद्यार्थी अपनी कुर्सी और आवश्यकताओं को ध्यान में रखते हुए दो में से किसी एक विकल्प का चयन कर सकते हैं।

(क) सूचना प्रौद्योगिकी और हिंदी

औषधि

आधुनिक युग में संचार माध्यम के क्षेत्र में तेजी से प्रगति हुई है और दुनिया सिमट कर एक बोटे-से शहर के रूप में बदल चुकी है। समाज में खबरें एक-दूसरे के पास तुरंत ही पहुंच जाती हैं। ऐसे में जनसंचार माध्यम एक महत्त्वपूर्ण भूमिका निभा रहे हैं।

जनसंचार माध्यमों के बढ़ते हुए महत्त्व के साथ-साथ भाषा का महत्त्व भी बढ़ा है। भारत में लोग अपनी राष्ट्रभाषा हिंदी में ही जानार्जन और विचारों का आदर-प्रदान करना उचित समझते हैं। अतः हिंदी भाषा शिक्षा और सूचना अर्जित करने का महत्त्वपूर्ण साधन है।

विद्यार्थियों के लिए जनसंचार के क्षेत्र में प्रयुक्त भाषा की विविधता के बारे में जान प्राप्त करना और उसकी नई शब्द-संपदा, नए-नए प्रयोग, और संकल्पनाओं के बारे में जानना आवश्यक है।

पूर्व अपेक्षाएँ: जनसंचार माध्यमों, जैसे-अखबार, रेडियो, दूरदर्शन, इंटरनेट तथा सामान्य ज्ञान आदि में प्रयुक्त हिंदी भाषा का सामान्य ज्ञान।
लक्ष्य: इस पाठ्यक्रम का लक्ष्य विद्यार्थियों में जन-संचार के क्षेत्र में प्रमुख हिंदी भाषा का अपेक्षित ज्ञान प्रदान करना है।

इंकारे:

1. सूचना प्रौद्योगिकी स्वरूप और महत्त्व
2. संचार माध्यम और उनके प्रकार
3. संचार की प्रक्रिया
4. संचार के माध्यमों के मुख्य अवयव
5. संचार माध्यमों की भाषा

योग्यता विस्तार

1. सामाजिक श्रेणियों को जनवरी ज्ञान के आलोक में पढ़ा।
2. रेडियो के प्रसारण को नई दृष्टि से सुनना और समझना।
3. दुर्दर्शन तथा अन्य टीवी, वेबसाइटों के कार्यक्रमों को नई दृष्टि से देखना।
4. स्थापित अखबार के कागज़ में जाकर तभी के क्रियाकलापों और विभिन्न गतिविधियों
   की प्रक्रिया के बारे में परिचय प्राप्त करना।
5. कंप्यूटर और इंटरनेट से आवश्यकतानुसार तथा विषयानुसार सूचनाएँ जुटाना।

(ख) विज्ञान की भाषा-हिंदी

आवर्त्ति:

विज्ञान का जीवन में बहुत महत्त्व है। कुछ वर्षों पहले व्यक्ति कल्पना भी नहीं कर सकता
था कि विज्ञान की अंग्रेजी के अलावा भी किसी अन्य भाषा में पढ़ा-पढ़ाया जा सकता है। परंतु
गत वर्षों में हिंदी भाषा में भी वैज्ञानिक साहित्य प्रचुर मात्रा में उपलब्ध हुआ है। विद्यार्थियों
में सामाजिक ज्ञान वृद्धि के लिए वैज्ञानिक हिंदी की शब्दावली और विभिन्न प्रयोगों की
जानकारी आवश्यक है। इसी बात को ध्यान में रखते हुए यह पाठ्यक्रम तैयार किया गया है।
पूर्व अपेक्षायें: हिंदी का सामान्य ज्ञान और विभिन्न वैज्ञानिक सामग्री का सामान्य परिचय
और सामान्य तार्किक ज्ञान।
लक्ष्य: इस पाठ्यक्रम को पढ़ने के बाद विद्यार्थी विज्ञान और भाषा के आपसी संबंध से परिचित हो सकेंगे और वैज्ञानिक क्षेत्र में हिंदी के तकनीकी शब्दों का उपयुक्त उपयोग कर सकेंगे।

शिक्षण बिंदु

1. वैज्ञानिक हिस्ट्री और वैज्ञानिक विकास
2. भारतीय विज्ञान
3. जनसंख्या वृद्धि और विज्ञान
4. कंप्यूटर, इंटरनेट और हिंदी
5. विज्ञान की भाषा-हिंदी
6. पारिमाणिक शब्दावली

योग्यता विस्तार

1. हिंदी में उपलब्ध विभिन्न सामग्री का अध्ययन और सामान्य वैज्ञानिक विषयों पर आलेख तैयार करना।
2. विषयानुसार वित्तिय प्रतिभाओं का उपयोग

परीक्षा योजना

सिद्धान्त: 80 अंक तथा अनुशिलक अंकि मूल्यांकन पत्र, 20 अंक

अंक विभाजन

मूल्यांकन के लिए कुल 100 अंकों का विभाजन इस प्रकार होगा-

केंद्रित हिंदी       85
पढ़ना               47
कविता।
पत्तित कविता          16   21
अपत्तित कविता         05
पत्तित गद्य             12   18
<table>
<thead>
<tr>
<th>मार्क्स</th>
<th>अंक</th>
</tr>
</thead>
<tbody>
<tr>
<td>अपठि गद्य</td>
<td>06</td>
</tr>
<tr>
<td>उपन्यास पठन</td>
<td>08 08</td>
</tr>
<tr>
<td>लिखना</td>
<td>28</td>
</tr>
<tr>
<td>अभिव्यक्तिपरक</td>
<td>12</td>
</tr>
<tr>
<td>प्रयोजनपरक</td>
<td>14</td>
</tr>
<tr>
<td>सृजनात्मक परिचिति 02</td>
<td></td>
</tr>
<tr>
<td>व्यावहारिक व्याकरण</td>
<td>10 10</td>
</tr>
<tr>
<td>वैकल्पिक हिंदी</td>
<td>85 15</td>
</tr>
<tr>
<td>कुल योग</td>
<td>100</td>
</tr>
</tbody>
</table>

उत्तीर्ण होने का मानदंड: 33% अंक
Introduction

In today’s global world, the importance of English cannot be denied and ignored since English is the most common language spoken everywhere and also it is the official language in a large number of countries. With the help of developing technology, English has been playing a major role in many sectors including medicine, engineering and education. It is the dominant business language and it has become almost a necessity for people to speak English if one has to enter a global workforce.

Rationale

In a pluralistic society like India the co-existence of diverse culture in a meaningful, secular manner to achieve the highest principles of multiculturalism depends upon effective communication among people and states of the union. Thus, a study of English within the context of contemporary India becomes essential not just for the purposes of communication within the country but also for purposes of communication across political boundaries. Knowledge of English also enables learners to aspire for job opportunities in the present scenario of global economy and access of the wealth concealed in time tested great works of literature produced in English. Thus for practical and utilitarian purposes as well as for pleasure, learning English becomes necessary.

Objectives

After completing this course, the learner will be able to:

- develop listening skills;
- develop speaking skills;
- develop reading skills;
- develop writing skills.

This course will also focus on elements of language – grammar and vocabulary. Special efforts will be made to enrich the vocabulary of students.

Scope and job opportunity

English being an international language has opened doors for jobs in India. In the era of media, TV channels in English and Hindi are opening up. English print media is also not behind the race in recruiting candidates. There is a great scope as Editor, Sub-editor, Assistant editor, Associate editor, Consulting editor, etc., both in media and other organizations. English translators and interpreters are also in demand. Lucrative career options are also available in schools, colleges and universities as teachers and lecturers.
Eligibility conditions

Age: 15 years

Qualification: 10\textsuperscript{th} pass

Medium of instruction: English

Duration of the course: 1 Year

Weightage

Theory: 100 Marks

Tutor Marked Assignments (TMA): 20\% Marks of the theory

Scheme of studies: Theory (240 hrs), TMA (self paced)

Scheme of evaluation: Theory paper 100 marks (3 hours), internal assessment (TMA) (20\% of theory marks)

Pass criteria: 33\% marks

Course content

Module –Listening skills

Hours -05

Approach: This module aims to develop listening comprehension in learners by exposing them to samples of good spoken English spoken at normal speed and representative of English accents heard in India. This module will be supported by an audio cassette of maximum 90 minutes.

At the end of the course the learner should be able to:

- understand English spoken at normal conversational speed
- understand questions
- follow directions
- understand the main idea of academic texts and texts drawn from real life listening situations like announcements at railway stations etc.

Module –Speaking skills

Hours -10

Approach: This module aims to train learners to respond simply and meaningfully in English while performing real time speech activities by exposing them to models to spoken interaction and encouraging them to repeat along suggested lines.
At the end of this course the learner should be able to:

- Speak English (sounds, words, phrases, sentence patterns) intelligibly
- Use English in familiar life situations

**Contents**

At the end of the course the learner should be able to use the following language functions and related language items appropriately for real time speech activities.

- Greetings/taking leave
- Introductions
- Seeking/supplying information
- Describing
- Narrating stories
- Reporting Events
- Making requests and Suggestions
- Giving Opinion
- Expressing Likes and dislikes
- Apologizing/expressing regret/thanking
- Giving directions/instructions
- Taking and giving messages

**Module - Reading skills**

Hours - 100

**Approach:** This module aims to develop reading skills in learners by exposing them to a variety of texts representative of different text types.

**UNITS**

**Prescribed texts**

<table>
<thead>
<tr>
<th>Text Type</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prose</td>
<td>20</td>
</tr>
<tr>
<td>Narrative</td>
<td>25</td>
</tr>
</tbody>
</table>

**Contents/lessons**

- Case of Suspicion
- Tiger in the Tunnel
- I must know the Truth
- Bholi
**Autobiography**
- My Son Shall Not a Beggar Be
- My First steps

**Letter**
- Father, Dear Father

**Play**
- If I Were You

**Essay**
- India, Her Past and Future

**Expository Piece**
- Fuel of the Future

**Poetry**
- Leisure
- My Grandmother's House
- Where the Mind Is Without Fear
- The Road Not Taken
- Night of the Scorpion

**UNIT**

**Non-prescribed texts**

(Lessons-10)

The above texts will be exploited to develop the following abilities in the learners:

- locate important facts
- grasp the meaning, facts and ideas
- skim a text to obtain its overall idea
- scan a text to locate specific information
- get the central idea of a piece
- follow the sequence of ideas and events
- identify relationship between characters, facts and ideas
- compare facts and ideas
- infer meaning
- evaluate ideas, events and actions
• enjoy a piece of literature and creative use of language
• identity the literary form
• identity literary devices (rhythm, images etc)
• interpret the functions of these literary devices
• infer non-verbal forms of presentations as given in charts and tables
• develop the habit of reading for information and pleasure
• use dictionary to find meaning and usage of words
• use other reference material like encyclopedia and railway time table
• transfer information from text to a table

N.B. Passages on adolescent’s reproductive and sexual health concerns such as drug abuse etc. and current global concerns such as AIDS etc. would be included.

Module-Grammar

Hours-15

Approach: This module aims to develop in learners the ability to use selected grammatical items appropriately by exposing them to grammar and usage in selected contexts.

Contents

• Revision of tenses with special references to the past tense
• Questions patterns
• Passive constructions
• Clauses
• Reported speech

Module –Writing skills

Hours-80

Approach: This module aims at developing in learners the ability to write-simply, coherently and briefly in English by exposing them to theme based writing tasks and encouraging them to write along line suggested.

Units

20 marks

Paragraph Writing 5 marks

(Contents /lessons)

Describing objects
Describing People
Describing experiences
Describing processes

**Letter writing** 5 marks

(Content /lessons)

Official letters

Personal letter

**Editing** 6 marks

**Study Skills**

(Content/lessons)

**Note Making** 4 marks

The above content areas are intended to make the learner able to:

- write simple sentences with correct punctuation and spelling
- present and develop simple ideas coherently
- organize ideas into paragraphs using appropriate sentence linkers
- narrate events chronologically
- describe objects, people and processes
- make notes
- write summaries

**Optional modules**

Hours -30

**Approach:** This module aims at developing in learners the ability to use English in specific situations like English for receptionists use or English for officer use. Two modules are offered here. A learner has to study and one. These modules are for vocational purposes. The focus is not on teaching the subject like Science or Literature but on the ways in which language in used in different situations.

**Unit –English for specific purposes** 15 marks

**English for receptionists (Optional 1)**

This module will introduce the learner to a variety of exercises, tasks and meaningful activities related to receptionist’s use of English.

**Contents /Lessons**

- receiving messages, making requests etc.
- supplying information
- giving advance and making suggestions
• dealing with complaints
• making entries in a register etc.

**English for office use (Optional 2)**

This module will help learners to use English effectively and appropriately in the office environment.

**Contents /Lessons**
• writing memos and letters
• writing e-mails
• using the telephone for effective business communication
• writing short reports
• writing a C.V.
• preparing for an interview
বাংলা বিষয়ের জন্য উচ্চ মাধ্যমিক স্তরের পাঠ্যক্রম নির্ধারিত হয়েছে তার সঙ্গে সংগতি রেখে এই স্তরের বাংলা বিষয়ের পাঠ্যসূচি তৈরি করা হয়েছে। পাঠ্যসূচির জন্য পাঠ নির্ধারণের সময় নির্দিষ্ট বিষয়গুলির উপর বিশেষ দৃষ্টি রাখা হয়েছে:

1. নির্ধারিত পাঠ্যগুলির মধ্য দিয়ে শিক্ষার্থীর মনে বাংলা ভাষা ও সাহিত্যের ধারাবাহিক পরিপ্রেক্ষা সম্পর্কে চেনানি সম্পাদন।

2. নির্ধারিত কবিতা গুলিকে যুগ অনুসারে বিভক্তি করে প্রায়-আধুনিক ও আধুনিক যুগের বাংলা কবিতার বিষয় ও ভাববিদ্যা সম্পর্কে প্রতিষ্ঠা ধারণা গড়ে তোলা।

3. নির্ধারিত গদ্য পাঠ্যগুলির মধ্য দিয়ে (ক) বাংলা গদ্যের প্রচলন ও আধুনিক রীতির পরিচয় দান (খ) বিষয় ও শৈলীর দিক দিয়ে বাংলা গদ্যের বৈচিত্র্য সম্পর্কে শিক্ষার্থীকে সচেতন করে তোলার চেষ্টা করা হয়েছে।

4. নির্ধারিত সুজন্মের গদ্য রাজনীতিগুলির (উপন্যাসের অংশ, ছোট গল্প ও নাট্য) মাধ্যমে শিক্ষার্থীদের মধ্যে এই ধরনের রাজনীতি সাধারণের ও রাজনীতি আধুনিকায় সামর্থ্য সৃষ্টি করা হয়েছে।

5. পাঠ্যসূচির পাঠ নির্ধারনের ক্ষেত্রে সামাজিকভাবে কঠিনগুলি জাতীয় ও আন্তর্জাতিক মূল্যবোধের দিকে দৃষ্টি রাখা হয়েছে। স্থান : সামাজিক সম্প্রদায়, নারীমুখী ও নারী-পুরুষের সমানতা, আমূলীয় জনজীবনের বৈচিত্র্য, পরিবেশের ভারসাম্য, পশুপালন, মহাজনি ও জমিদারি শোষণের বিরুদ্ধে জনস্বীকৃত সামাজিক আইনপ্রণালী, জাত-পার্থক্য-অস্পষ্টতা, ধর্মীয়তার বিষয়বস্তু, বিভিন্ন সংস্কৃতি, সামাজিক অনুভূতি ব্যর্থতা।

6. স্থায়ী ও নির্ধারিত জন্য যেমন পাঠ্য বিষয় নির্ধারন করা হয়েছে সেগুলির মধ্য দিয়ে ব্যাখ্যায় ও ভাষার গতানুপস্থিত ধারার বলে বাংলার রাজনীতিগুলি তথ্য প্রয়োগমূলক নিয়ন্ত্রণের দিকে বিষয় বোধ দেওয়া হয়েছে। বিশেষত নির্ধারিত ক্ষেত্রে এমন কার্যকলাপ বিষয় নির্ধারণ করা হয়েছে যেগুলির মাধ্যমে শিক্ষার্থী তার কমিউনিটির ব্যবহারিক ক্ষেত্রে নিগুঢ় প্রয়োগ-সামর্থ্য অর্জন করতে পারবে।

নির্ধারিত পাঠ্যাস্ত্রের তালিকা পাঠ দেওয়া হল:

ক) কোনো পাঠ্য অনুযায়ী উপন্যাস ছাড়া দুটি বই হবে। এ ছাড়া উপন্যাস ও বিভিন্ন বিষয়ের জন্য পৃথক বই হবে। তিনটি বইয়ের জন্য মোট (20+12+3) মোট 35টি পাঠ থাকবে।

খ) প্রথম বইয়ের বিষয়:
(ক) পাঠ্য বিষয়ের বহুভাবের কবিতা ও সম্মেলিত আলোচনা
(খ) পাঠ্য বিষয়ের সম্পর্কে সম্মেলিত গল্প (কথাসাহিত্য ও নাটক)
(গ) পাঠ্য বিষয়ের সম্পর্কে সম্মেলিত গল্প (কথাসাহিত্য ও সাহিত্যের অংশ ও নাটকের অংশ)
(ঘ) বাংলা ভাষার সাংগঠিত ইতিহাস (নির্ধারিত পাঠ্যগুলির ভিত্তিতে)

21
প্রতিবৃত্তির বিষয়:

১. সারারেহর,
২. পুলকন — প্রভায় ও সমস্যাগুলো,
৩. তথ্যটির পরিবর্তন (সাধু চলিত)
৪. বাস্তবের নৃপতি, গঠনসূত্র ও অধ্যয়ন।

নির্দেশ

৫. পরিচিত কর্মকর্তা ও প্রশিক্ষণ (আবিষ্কার) পত্রের খসড়া বা মুদ্রিত রচনা
৬. সরকারের (প্রেসি)
৭. প্রতিষ্ঠান রচনা
৮. অবিদ্যালয়ের কাজের নোট দেওয়া
৯. তালিকা রচনা (কেনা বিষয়ের শ্রেণীবিন্দু সামগ্রী ও উপলব্ধি)
১০. নির্দিষ্ট প্রথমবারের (স্মৃতি family tree) ব্যাখ্যা ও বিশ্লেষণ
১১. পাঠ বহিঃবৃত্ত অংশের বোধ অধ্যয়ন (test of comprehension)
১২. নোট দেওয়া ও নোট দেওয়া।

নামন - ১২

নামন - ৩৩

খ) কৃতিত্ব বইরের বিষয়:

ক) উপাধি - আরোপক - কিছু কিছু ব্যঞ্জনপাতান্য

প) ঐতিহ্য বিষয়:

(১) পঞ্চাশ:(Tourism)

ক) সন্তায় ও উদ্যোগ

(খ) পর্যটনের স্থান - একাদ

(গ) আধুনিক পর্যটন সহজ

(ঘ) পর্যটনের নামা ভূগ

(ঘ) পর্যটনের পরিকল্পনা

(চ) পর্যটনের পরিবেশবাদ নির্দিঃ

(ছ) পর্যটনের বাণিজ্যিক নির্দিঃ

(জ) পর্যটনের সাবস্ক্রিপ্ট নির্দিঃ

(য) পর্যটনে আর্থিক সম্পত্তি ও আয়করণিক হোস্পের সুযোগ

নামন - ৪০ নব্বর
1. முதல்

2. தோண் குறிப்பிட்டு

3. பல்லவியினங்கள்
4. பயிற்சிக்குறிப்பு

அ. சம்பாத்திச் செய்யல்

+ நெடுஞ்சாட்டின் நிலைப்புக்கு முறையிய நிலையை விளக்கும் நூற்றாண்டு முறையில் செய்யப்பட்டுள்ளது.
+ பல்வேற்றுக்கான கல்விகள் விளக்கும்.
+ பொதுக்கான நிலையில் கல்லுகள் வெளிப்படுத்துவதற்கு காரணிகள் உள்ளது முறையில் புது நிலையில் செய்யப்பட்டுள்ளது.
+ கல்லுடைப்புகளுக்கு எதிராக உயர்விளங்குப்பாட்டை வழங்குவதற்கான குறிப்புகள் வழங்கப்பட்டது.

ஆ. நெடுங்கோதம்

1. பொதுக்கான நெடுத்து நூற்றாண்டுப்படை.
2. நெடுங்கோதத்தில் உரையாடும் முறை.
3. சுருக்கம் சுருக்கம் வழங்கும் நூற்றாண்டுப்படை.
4. நெடுங்கோதம் வளர்மன் வழங்கும் முறையில் புதுப்படுத்தும் நூற்றாண்டு

மறு வருடம், மாதம், நாட்டு

1. உறுப்பினர் குறிப்பிட்டு பரிசாரிக்கு.
2. குறிப்பிட்டு பரிசாரிக்கு வழிகாட்டுதல் (விளக்கம், அடுத்தது, குறிப்பிட்டு, விளக்கம்.)
3. பரிசாரிக்குதல் விளக்கப்பட்டு.
4. குறிப்பிட்டு பரிசாரிக்கு வழங்கப்பட்டு.
5. குறிப்பிட்டு பரிசாரிக்கு வழங்கப்பட்டு - குறிப்பிட்டு வழங்கப்படும், பரிசாரிக்கு, குறிப்பிட்டு, அடுத்தது, விளக்கம் வழங்கப்படும் புதுப்படுத்தும்.

நெடுங்கோதம்

1. நெடுங்கோதம் வழங்கப்பட்டு
2. குறிப்பிட்டு வழங்கப்பட்டு
3. குறிப்பிட்டு வழங்கப்பட்டு
4. குறிப்பிட்டு வழங்கப்பட்டு
5. நெடுங்கோதம் வழங்கப்பட்டு வழங்கப்பட்டு
அனுநாயக்கப் பொருட்கள்

+ நோய்விப்பு விளைவோரால் மிகவும் மரணமாகிறது.
+ தான் புதுக்கொட்டை, அப்பெரும்காலன ஆரையேது.
+ வரிசையின் அரசுக் கழகத்தில் உள்ள நிஜப்பணி செயலாட்டுகளை மேம்படுத்துவது.
+ தன்னால் பொருட்கள் விளையாட்டு, அறுகின்றோம், தன்னால் பார்ப்பால் நிஜயால் மிகவும் மேம்படுத்துவது.
+ என்ற நோய்விப் பருவத்தைக் கொண்டு உருவாவது அல்லது ஒன்றாக வருவது.

அறிவியல் பராமே

+ குளிர் குறித்து பற்றிய விளக்கம்.
+ குளிர் நிற்கும் பற்றிய விளக்கம்.
+ வரும் களத்தை, ஆசாத் பற்றிய விளக்கம்.
+ மூலையில், பயன் படையிலுள்ள காட்சிகளை, மீண்டும் வரும் காட்சிகளை முன்னறியும்.
+ என்றால், ஒளியில், துளீயில், நீரில் போன்றவை.

செயல் முக்கியமான

+ ஒன்றாலும், பருவல் பற்றிய விளக்கம்.
+ அதாவது போல்கள் உயர்பெருக்கியது, பெருமையானது.
+ பார்வைகள், புனிதராயிலகள், தில்லியானார், விளையாட்டு விளக்கங்கள்.
+ இந்த புனிதராயிலகள், எதையும், தில்லியானார் - தில்லியானார்.

முப்புறையில்

+ பார்வையில்
+ பார்வையில்
+ பார்வையில்
+ பார்வையில்
+ பார்வையில்
+ குறிப்பிட்டு ஒன்றாலும் படையிலுள்ள விளக்கம்
+ குறிப்பிட்டு ஒன்றாலும் படையிலுள்ள விளக்கம்
+ குறிப்பிட்டு ஒன்றாலும்
+ குறிப்பிட்டு ஒன்றாலும்
+ குறிப்பிட்டு ஒன்றாலும்

அ. தில்லியானார்

+ பார்வையில் விளையாட்டு விளையாட்டு, பார்வையில், பார்வையில், பார்வையில் விளையாட்டு விளையாட்டு.
+ பார்வையில், பார்வையில், பார்வையில் விளையாட்டு, பார்வையில் விளையாட்டு விளையாட்டு.
5. பார்வூக் அக்காலம்

1. குறிப்பிட்டுக்கோள்: சொல்களுக்கான வெளிநாட்டுக்காக வைத்தியூரில் கல்வி பெறுகையின் அளிப்பான நுட்பங்களைக் குறிப்பிட்டு அக்காலத்தில் விளக்கும்.

2. பார்வூக் குறிப்பிட்டுக்கோள்: குறிப்பிட்டுக்கான வெளிநாட்டு ஆண்டுக்காக குறிப்பிட்டுக்கோள் சொல்லில் குறிப்பிட்டு வைத்தியூரில் கல்வி பெறுகையின் நுட்பங்களை விளக்கும்.

3. முன்னாள் நடைபெற்றுக்கோள்: குறிப்பிட்டுக்கோள் வைத்தியூரில் கல்வி பெறுகையின் நுட்பங்களை விளக்கும் அளிப்பான நுட்பங்களைக் குறிப்பிட்டு விளக்கும்.

4. பார்வூக் குறிப்பிட்டுக்கோள்: வைத்தியூரில் கல்வி பெறுகையின் நுட்பங்களை விளக்கும் அளிப்பான நுட்பங்களை விளக்கும்.

5. முன்னாள் நடைபெற்றுக்கோள்: வைத்தியூரில் கல்வி பெறுகையின் நுட்பங்களை விளக்கும் ஆண்டுக்காக நுட்பங்களை விளக்கும்.

6. பார்வூக் குறிப்பிட்டுக்கோள்: நுட்பங்களை வைத்தியூரில் கல்வி பெறுகையின் நுட்பங்களை விளக்கும் ஆண்டுக்காக நுட்பங்களை விளக்கும்.

7. முன்னாள் நடைபெற்றுக்கோள்: வைத்தியூரில் கல்வி பெறுகையின் நுட்பங்களை விளக்கும் ஆண்டுக்காக நுட்பங்களை விளக்கும்.

8. பார்வூக் குறிப்பிட்டுக்கோள்: வைத்தியூரில் கல்வி பெறுகையின் நுட்பங்களை விளக்கும் ஆண்டுக்காக நுட்பங்களை விளக்கும்.

9. முன்னாள் நடைபெற்றுக்கோள்: வைத்தியூரில் கல்வி பெறுகையின் நுட்பங்களை விளக்கும் ஆண்டுக்காக நுட்பங்களை விளக்கும்.

5.1 கணினிக்கருத்துக் காலம்

<table>
<thead>
<tr>
<th>கைவடிவான் நோக்கம்</th>
<th>85</th>
</tr>
</thead>
<tbody>
<tr>
<td>ப்ளீம்பி குழாய்</td>
<td>35</td>
</tr>
<tr>
<td>வடிவான் குழாய்</td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>அணி கைவடிவான் நோக்கம்</th>
<th>45%</th>
</tr>
</thead>
<tbody>
<tr>
<td>பொழுதுகை கைவடிவான் நோக்கம்</td>
<td>20%</td>
</tr>
<tr>
<td>பொழுதுகை கைவடிவான் நோக்கம்</td>
<td>20%</td>
</tr>
</tbody>
</table>
5.2 சுருக்கம்

சுருக்கம்: 15

1. ரீதியாகப் பதிவு
2. முன்னெச்சரிக்கைப் பதிவு

(சார்புடன் இணைந்து கொண்டுள்ள முன்னெச்சரிக்கை பதிவு முன்னெச்சரிக்கைப் பதிவு)

6. முக்கியமான விவரங்கள்

6.1 முக்கியமான பாதுகாப்பு

அ. முக்கியமான பாதுகாப்பு

காரணம்: 10 மீட்டர் இருக்கும்

துறைகள்: மன்னர் கூட்டம் அல்லது அனைத்து குறுக்கணைகள். போக்குவரத்து, பெருமையுள்ள, சிறு தொழில்நுட்பம் மற்றும் தமிழ் பாணியில் ஆணி கிளாம் போன்ற அங்கங்கள்.

ஆ. கோட்டை

காரணம்: 10 மீட்டர் இருக்கும்

துறைகள்: மன்னர் கூட்டம் தோற்ற வளாக புதிதை விளகல்கள்

(முக்கிய நிறுவனங்கள், போக்குவரத்து, செயல் நிறுவனங்கள், பெருமை நிறுவனங்கள் போன்றவை)

விடுதியிலுள்ள புதிதை விளகல்கள் விளகலானவை முக்கிய நிறுவனங்கள்

(அருங்குடைச்சு, பெருமை, செயல், போக்குவரத்து, செயல், போக்குவரத்து)

இ. மற்றும்

முக்கியமான: 45
c

காரணம்: 100 மீட்டர் இருக்கும்

சுருக்கம்: 25
Odia
Code No. 305

3.0 तात्पर्य

कृपया ध्यान दें कि कृपया अपनी जीवन में उपयोग की जातीय तिथियां से अलग रखें। यदि हाल के दिनों में क्या-क्या बाज़ारों में चारित्र किए गए हैं तो उनका वर्णन करें। यदि कोई अन्य स्पष्ट अवसर उपलब्ध है तो उसे भी उल्लिखित करें।

4.0 महत्वपूर्ण बांधकाम

आश्चर्यजनक जन और नागरिक जन के लिए यह बांधकाम सबसे महत्वपूर्ण है। आपके लिए यह बांधकाम आपकी आत्म-रक्षा की तनाव को भागीदारी से बचाने के लिए आवश्यक है। यदि आपके सामने हादसा हो तो उसका सामना करें।

5.0 ध्यान

आपके लिए यह ध्यान आपकी आत्म-रक्षा की तनाव को भागीदारी से बचाने के लिए आवश्यक है। यदि आपके सामने हादसा हो तो उसका सामना करें।

6.0 तात्पर्य

कृपया ध्यान दें कि कृपया अपनी जीवन में उपयोग की जातीय तिथियां से अलग रखें। यदि हाल के दिनों में क्या-क्या बाज़ारों में चारित्र किए गए हैं तो उनका वर्णन करें। यदि कोई अन्य स्पष्ट अवसर उपलब्ध है तो उसे भी उल्लिखित करें।
4.0 ଲାକନାପ
ବିଶ୍ବ ବାଣାନ୍ତର ପରିକର ଓ ଇଇଁକୁ ଲାକନାପ:

4.1 ବାଣାନ୍ତର ଲାକନାପ

• ବିଶ୍ବରେ ଗୁମାନୀ ଓ ବାଣାନ୍ତର ଲାକନାପ ଏବଂ ଲାକନାପ ପରିକର ମଧ୍ୟରେ ଏହା ଲାକନାପ ପରିକର ରେକମେଣ୍ଡ ଯାନ୍ତ୍ରିକୀ କରାଲାଧନ କରନ୍ତା।
• ବାଣାନ୍ତର ସମାଧାନ କରରେ ଅପରିକର ଏବଂ ତାହାରେ ରିକଡ଼ର ଅପରିକର ରେକମେଣ୍ଡ କରାଲାଧନ କରନ୍ତା।
• ଜ୍ଞାନପରିକର ଲାକନାପ ସମାଧାନ ଲାକନାପ ଏବଂ ବାଣାନ୍ତର ରେକମେଣ୍ଡ କରାଲାଧନ କରନ୍ତା।
• ପାଇଁ ରେକମେଣ୍ଡ ଲାକନାପ ସମାଧାନ ଲାକନାପ ରେକମେଣ୍ଡ କରାଲାଧନ କରନ୍ତା।
• ବାଣାନ୍ତର ସମାଧାନ ସମାଧାନ ରେକମେଣ୍ଡ ରେକମେଣ୍ଡ ଲାକନାପ ରେକମେଣ୍ଡ କରାଲାଧନ କରନ୍ତା।
• ରେକମେଣ୍ଡ ସମାଧାନ ରେକମେଣ୍ଡ ଲାକନାପ ରେକମେଣ୍ଡ କରାଲାଧନ କରନ୍ତା।

4.2 ପାଇଁକୁ ଲାକନାପ

ବିଶ୍ବ ବାଣାନ୍ତର ସମାଧାନ ବିଶ୍ବ ବାଣାନ୍ତର ଲାକନାପ ଏବଂ ଲାକନାପ ପରିକର ମଧ୍ୟରେ ଏହା ଲାକନାପ ପରିକର ରେକମେଣ୍ଡ ଯାନ୍ତ୍ରିକୀ କରାଲାଧନ କରନ୍ତା।

4.3 ଅନୁକୂଲ ସମାଧାନ

ପରିକର ବାଣାନ୍ତର ସମାଧାନ ଏବଂ ବିଶ୍ବରେ ଅପରିକର ଲାକନାପ ଏବଂ ବାଣାନ୍ତର ଲାକନାପ ପରିକର ମଧ୍ୟରେ ଏହା ଲାକନାପ ପରିକର ରେକମେଣ୍ଡ ଯାନ୍ତ୍ରିକୀ କରାଲାଧନ କରନ୍ତା।

ବିଶ୍ବରେ ବାଣାନ୍ତର ଲାକନାପ ପରିକର ରେକମେଣ୍ଡ ବିଶ୍ବ ବାଣାନ୍ତର ଲାକନାପ ଏବଂ ଲାକନାପ ପରିକର ମଧ୍ୟରେ ଏହା ଲାକନାପ ପରିକର ରେକମେଣ୍ଡ ଯାନ୍ତ୍ରିକୀ କରାଲାଧନ କରନ୍ତା।

4.4 ଅନୁକୂଲ ସମାଧାନ

(ସୁପିନ୍ଦିତ ସମାଧାନ ଏବଂ ବାଣାନ୍ତର ଲାକନାପ ଏବଂ ଲାକନାପ ପରିକର ମଧ୍ୟରେ ଏହା ଲାକନାପ ପରିକର ରେକମେଣ୍ଡ ଯାନ୍ତ୍ରିକୀ କରାଲାଧନ କରନ୍ତା।)

• ବିଶ୍ବ ବାଣାନ୍ତର ସମାଧାନ ଏବଂ ଲାକନାପ ପରିକର ମଧ୍ୟରେ ଏହା ଲାକନାପ ପରିକର ରେକମେଣ୍ଡ ଯାନ୍ତ୍ରିକୀ କରାଲାଧନ କରନ୍ତା।

29
• ବାହାରା ଓ ବାହାରା ସର୍ବତ୍ର ଉଭୟଦୃଷ୍ଟି ସାଧାରଣ କରାଏ ଯାଏ କିନ୍ତୁ ବାହାରା ଆପନାରେ ଏକ ଦିନରେ କରନ୍ତୁ ବାହାରା ଦିନରେ ବାହାରା ଦିନରେ କରନ୍ତୁ ବାହାରା ଦିନରେ କରନ୍ତୁ।

• ସୁପ୍ପିତ କରାଏ ଭୂଭାଗ ଦୃଷ୍ଟି ସମ୍ବନ୍ଧରେ କରାଏ ଯାଏ କିନ୍ତୁ ତେବେ ତେବେ ଠମାଚା ଭାବକୁ ଭାବକୁ ଦିନରେ କରନ୍ତୁ।

• ସୁପ୍ପିତ କରାଏ ମେଲ ଏକ ଭାବକୁ ଭାବକୁ ଦିନରେ କରନ୍ତୁ।

• ଆପନାରେ ନେଟ କରାଏ ଭୂଭାଗର କରାଏ ଭୂଭାଗର କରାଏ ନେଟ କରନ୍ତୁ ଭାବକୁ ଭାବକୁ ଦିନରେ କରନ୍ତୁ।

• ମେଲ ନେଟ କରାଏ ଭୂଭାଗ ଦୃଷ୍ଟି ସମ୍ବନ୍ଧରେ କରାଏ ଯାଏ କିନ୍ତୁ ତେବେ ତେବେ ଠମାଚା ଭାବକୁ ଭାବକୁ ଦିନରେ କରନ୍ତୁ।

• ନେଟ କରାଏ ଭୂଭାଗ ନେଟ କରାଏ ଭୂଭାଗ ନେଟ କରନ୍ତୁ ଭାବକୁ ଭାବକୁ ଦିନରେ କରନ୍ତୁ।

• ଆପନାରେ ନେଟ କରାଏ ଭୂଭାଗର କରାଏ ଭୂଭାଗର କରନ୍ତୁ ଭାବକୁ ଭାବକୁ ଦିନରେ କରନ୍ତୁ।

• ସୁପ୍ପିତ କରାଏ ପର୍ବତ ବୁଧ ଭାବରେ କରନ୍ତୁ ଭାବକୁ ଭାବକୁ ଦିନରେ କରନ୍ତୁ।

• ସୁପ୍ପିତ କରାଏ ଭୂଭାଗର କରାଏ ଭୂଭାଗର କରନ୍ତୁ ଭାବକୁ ଭାବକୁ ଦିନରେ କରନ୍ତୁ।

• ଚର ନେଟ କରାଏ ଭୂଭାଗ ନେଟ କରନ୍ତୁ ଭାବକୁ ଭାବକୁ ଦିନରେ କରନ୍ତୁ।

"କୁକୁତୁଖା ପୁରୋଗାହ୍ନା ପୁନାଗାହ୍ନା ପୁନାଗାହ୍ନା ପୁନାଗାହ୍ନା ପୁନାଗାହ୍ନା"

(ସୁପ୍ରକ୍ଷା ଓ ପୁରୋଗାହ୍ନା ପୁ୍ରୋଗାହ୍ନା ପୁ୍ରୋଗାହ୍ନା ପୁ୍ରୋଗାହ୍ନା)
• ବାଣ ରାଜ୍ୟରେ ବାଣ ଜ୍ଞାନଧାରା ଅଜିତୁ ପୁରାତତା ଦୋଇମିତି।
• ଲିଖିତୁ ବାଣଜ୍ଞାନ ଓ କତିବା ଯାଚିତ ବାଣଜ୍ଞାନ ରାଜାମୁଖ ଯାଚି 
ଦିକ ଲିକେ।

ଭରପୂରା ବଠଙ୍କ (୧୯୫୪, ଧିକ ଏ ମିଶ୍ରା ଦଙ୍କ ବଣ୍ଡ ବାଣଜ୍ଞାନ ଭରପୂରା ଭରପୂରା ଭରପୂର ଧାରା ଲିକେ 
ଲିକେ)
• ପଦ୍ମ ଭରପୂରା ସଗ୍ରହିତ ବଠଙ୍କ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ 
ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ 
ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ ପୁଡୁ 

5.0 କାପଟଣ ବଠଙ୍କ

କାପଟଣ ବଠଙ୍କେ କାପଟଣ ସିବା ଚାଲିତ ଚାଲିତ ଚାଲିତ ଚାଲିତ ଚାଲିତ ଚାଲିତ ଚାଲିତ ଚାଲିତ ଚାଲିତ ଚାଲି 
ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି ଚାଲି 

31
6.0 ଆପାରକନାଲ ମିଶ୍ରନଙ୍କ

6.1 ସପ୍ରକୃତ ମିଶ୍ରନଙ୍କ ପରିଶୀଳନ ପିଁ

6.2 ସପ୍ରକୃତ ମିଶ୍ରନଙ୍କ ପରିଶୀଳନ ପିଁ

6.3 ମିଶ୍ରନଙ୍କ ପରିଶୀଳନ ପିଁ

7.0 ଦିଶିତ

7.1 ଦରାଶ୍ର

7.1.1 ଦିଶିତ

7.1.2 ଦିଶିତ

7.1.3 ଦିଶିତ

7.1.4 ଦିଶିତ

7.2 ଦିଶିତ

7.2.1 ଦିଶିତ

7.2.2 ଦିଶିତ

7.2.3 ଦିଶିତ

7.3 ଦିଶିତ

7.3.1 ଦିଶିତ

7.3.2 ଦିଶିତ
I Gjûe aòhd bûM aýûLýû, ùg÷KúMZ ÊZªZû ij _eòPòZ Gjûe CùŸgýö Gjû _eòù_âlúùe -

6.4 Ďæszud

I.0 Ďâbų kíxă ăîuł

(2) Ďâbų (Ďâ)

(3) Ďûkų Ďâkâ

(4) Ďâlâđâ
(৪) নির্দেশনাও এবং প্রশ্ন
নির্দেশনা
প্রশ্ন

(৫) প্রশ্ন

(৬) পাঠকের

(৭) দাতনেদা

(৮) শুধু এবং লিখন

(৯) আপনি কোনটে আরাম দিন থাকেন?

(১০) নিভেন (জিনিস / লিখন)

(১১) বেশি চাহিে পড়ালার

(১২) আপনি কোনটে আরাম দিন থাকেন?

(১৩) শুধু এবং লিখন

(১৪) আপনি কোনটে আরাম দিন থাকেন?

(১৫) শুধু এবং লিখন

(১৬) আপনি কোনটে আরাম দিন থাকেন?

(১৭) শুধু এবং লিখন

(১৮) আপনি কোনটে আরাম দিন থাকেন?

(১৯) শুধু এবং লিখন

(২০) আপনি কোনটে আরাম দিন থাকেন?

(২১) শুধু এবং লিখন

(২২) আপনি কোনটে আরাম দিন থাকেন?

(২৩) শুধু এবং লিখন

(২৪) আপনি কোনটে আরাম দিন থাকেন?

(২৫) শুধু এবং লিখন

(২৬) আপনি কোনটে আরাম দিন থাকেন?

(২৭) শুধু এবং লিখন

(২৮) আপনি কোনটে আরাম দিন থাকেন?

(২৯) শুধু এবং লিখন

(৩০) আপনি কোনটে আরাম দিন থাকেন?

(৩১) শুধু এবং লিখন

(৩২) আপনি কোনটে আরাম দিন থাকেন?

(৩৩) শুধু এবং লিখন

(৩৪) আপনি কোনটে আরাম দিন থাকেন?

(৩৫) শুধু এবং লিখন

(৩৬) আপনি কোনটে আরাম দিন থাকেন?

(৩৭) শুধু এবং লিখন

(৩৮) আপনি কোনটে আরাম দিন থাকেন?

(৩৯) শুধু এবং লিখন

(৪০) আপনি কোনটে আরাম দিন থাকেন?

(৪১) শুধু এবং লিখন

(৪২) আপনি কোনটে আরাম দিন থাকেন?

(৪৩) শুধু এবং লিখন

(৪৪) আপনি কোনটে আরাম দিন থাকেন?

(৪৫) শুধু এবং লিখন

(৪৬) আপনি কোনটে আরাম দিন থাকেন?

(৪৭) শুধু এবং লিখন

(৪৮) আপনি কোনটে আরাম দিন থাকেন?

(৪৯) শুধু এবং লিখন

(৫০) আপনি কোনটে আরাম দিন থাকেন?

(৫১) শুধু এবং লিখন

(৫২) আপনি কোনটে আরাম দিন থাকেন?

(৫৩) শুধু এবং লিখন

(৫৪) আপনি কোনটে আরাম দিন থাকেন?

(৫৫) শুধু এবং লিখন

(৫৬) আপনি কোনটে আরাম দিন থাকেন?

(৫৭) শুধু এবং লিখন

(৫৮) আপনি কোনটে আরাম দিন থাকেন?

(৫৯) শুধু এবং লিখন

(৬০) আপনি কোনটে আরাম দিন থাকেন?

(৬১) শুধু এবং লিখন

(৬২) আপনি কোনটে আরাম দিন থাকেন?

(৬৩) শুধু এবং লিখন

(৬৪) আপনি কোনটে আরাম দিন থাকেন?

(৬৫) শুধু এবং লিখন

(৬৬) আপনি কোনটে আরাম দিন থাকেন?

(৬৭) শুধু এবং লিখন

(৬৮) আপনি কোনটে আরাম দিন থাকেন?

(৬৯) শুধু এবং লিখন

(৭০) আপনি কোনটে আরাম দিন থাকেন?

(৭১) শুধু এবং লিখন

(৭২) আপনি কোনটে আরাম দিন থাকেন?

(৭৩) শুধু এবং লিখন

(৭৪) আপনি কোনটে আরাম দিন থাকেন?

(৭৫) শুধু এবং লিখন

(৭৬) আপনি কোনটে আরাম দিন থাকেন?

(৭৭) শুধু এবং লিখন

(৭৮) আপনি কোনটে আরাম দিন থাকেন?

(৭৯) শুধু এবং লিখন

(৮০) আপনি কোনটে আরাম দিন থাকেন?

(৮১) শুধু এবং লিখন

(৮২) আপনি কোনটে আরাম দিন থাকেন?

(৮৩) শুধু এবং লিখন

(৮৪) আপনি কোনটে আরাম দিন থাকেন?

(৮৫) শুধু এবং লিখন

(৮৬) আপনি কোনটে আরাম দিন থাকেন?

(৮৭) শুধু এবং লিখন

(৮৮) আপনি কোনটে আরাম দিন থাকেন?

(৮৯) শুধু এবং লিখন

(৯০) আপনি কোনটে আরাম দিন থাকেন?
تعمیر

اردوژاں میں مکتبی نظام نکلا ہے کہ آپ کتاب ترمیم دعوت کے کئی نصاب مندرجہ ذیل فیصلہ پر سپر کتاب کتاب میں ترمیم کی اور ہندی بائیکی
کتاب کا ترمیم دعوت کے کئی نصاب مندرجہ ذیل بیانات پر سپر کتاب کتاب میں ترمیم دعوت کے کئی نصاب مندرجہ ذیل بیانات پر سپر کتاب
کتاب کا ترمیم دعوت کے کئی نصاب مندرجہ ذیل بیانات پر سپر کتاب کتاب میں ترمیم دعوت کے کئی نصاب مندرجہ ذیل بیانات پر سپر کتاب
کتاب کا ترمیم دعوت کے کئی نصاب مندرجہ ذیل بیانات پر سپر کتاب کتاب میں ترمیم دعوت کے کئی نصاب مندرجہ ذیل بیانات پر سپر کتاب

1

یہ کتاب بندہ زبان (i) ادب کی تعلیم (ii) ادب کی تعلیم (iii) ادب کی تعلیم (iv) معاشرتی مسائل سے وابستہ (v) معاشرتی مسائل سے وابستہ (vi) معاشرتی مسائل سے وابستہ

پاکستان کا بندہ زبان (i) ادب کی تعلیم (ii) ادب کی تعلیم (iii) ادب کی تعلیم (iv) معاشرتی مسائل سے وابستہ (v) معاشرتی مسائل سے وابستہ

یہ کتاب بندہ زبان (i) ادب کی تعلیم (ii) ادب کی تعلیم (iii) ادب کی تعلیم (iv) معاشرتی مسائل سے وابستہ (v) معاشرتی مسائل سے وابستہ

یہ کتاب بندہ زبان (i) ادب کی تعلیم (ii) ادب کی تعلیم (iii) ادب کی تعلیم (iv) معاشرتی مسائل سے وابستہ (v) معاشرتی مسائل سے وابستہ
(الف) منشاہوا بانیا

ظالم معاشری زبان میں استحکام کے خواہش کا بیان کرنا ہے۔ معاشرہ کے منشیوں کی بچپن میں رسیدہ ہو گئی انسانیت کا معنوی میدان میں اینچال کی جا چکا ہے۔ استحکام کے خواہش کا بیان معاشرہ کے منشیوں کی بچپن میں رسیدہ ہو گئی انسانیت کا معنوی میدان میں اینچال کی جا چکا ہے۔

(i) (ب) اردوژبان کی تعلیم کے عام مقاصد

(ii) (ب) اردوژبان کی تعلیم کے عام مقاصد

(iii) (ب) اردوژبان کی تعلیم کے عام مقاصد

(iv) (ب) اردوژبان کی تعلیم کے عام مقاصد

(v) (ب) اردوژبان کی تعلیم کے عام مقاصد

(vi) (ب) اردوژبان کی تعلیم کے عام مقاصد

(vii) (ب) اردوژبان کی تعلیم کے عام مقاصد

(viii) (ب) اردوژبان کی تعلیم کے عام مقاصد
(ب) انسلانے کو میں اوہ غائی افکار

نام کتب نہ تصدیق ہے واقعہ شہید خیال اقدار کے ضرورت کے طالب فیض الیکا ہیں۔

1- ساہیہ اشہ پہچان
2- بیک بہتر کہلائے
3- خستے خلیج انسان دوہی، خیالی چاہے
4- اتھواں اوہ تھندری
5- میت
6- سبہ بہت خرزم شاہت
7- عدل و انصاف
8- کام میں ہیکر کرتا
9- رہنماؤ
10- ایک تاریکی
11- ذہن کا حساس اور فرش شکاکی
12- علی احوال کی پانیہ
13- وقتی پانیہ
14- چپ الازل توہی کئی میں
15- چپ بہتہ
16- رواداری نئے نام نہایب کا اہرام
17- مسجد صادق، علم سے مار بکاکوک
18- اپنی توہی اور فیصلہ ہی دوہیت چھیا کہ
19- وہنے کے لیے ایک ہوربیانی کا جدہ ہے۔
शीर्षक : ગુજરાતીના પાઠક્રમના બધા ઓખમોનું અહીંતન અને સમજ (ઘાયલ, વાંચતન, ક્થાન, લેખ અને અનુમાનના સંદર્ભમાં)

પ્રસ્તાવના : શ્રેષ્ઠ અને વાંચતન બાર પ્રાપ્ત ધાતી લાભ સામેજીને તેના વપરાશના સંદર્ભમાં યોજના રીતે સમજને તેનું અર્થપદાતન કરીને યો યાદીનુું ઉપયોગ કરના અને લેખનમાં કાર રીતે શક્ત શકે તેની તાલીમ માનવવાનો આશ્રય છે.

ઉપેક્ષા : આ તાલીમ દ્વારા ગુજરાતી લાભાની મોલિક અને દેખાત અલિબ્યાદક્ત બધાં અસરશક્ત અને સમજ બને યો આ તાલીમનો ઉપેક્ષા છે.

હેતુ : ઉપરના ઉપેક્ષાને પરિશ્લિમતિની બનાવના માટે પાઠકસામેજીનો માન્યતાથી અને લીંબાંઠ કાર રીતે વાંચતન શક્ત તેનું અર્થપદાતન અને સમજનું કાર રીતે સપષ્ટ કરી શકાય તેની તાલીમ દીક્ષા પાશે વિવિધ વિભાગોને સૌખીની ભાવભૂતામાં પ્રાથ્મિક કેન્દ્રેલં હંમે તે અપેક્ષિત છે.

1. ગૃહ - પ્રતિભાસ્થ ગૃહભક્ષણ કરવામાં આવતી સામેજીની આડી બનાવો.

2. તારા ની ગિયિત્રી બહુભાષીના આધારે સમજય બાક તેનું તારા કાડું અને ગૃહભક્ષણ કરાર શકાય છે.

3. સંભેલી - વાંચતન સામેજી મુદાહથોની આડી બનાવો.

4. તે મુદાહથોને સમજાવ શકે અને તેનું વિવર્ણ કરી શકે.

5. ઉદાહરણો અને પાઠ્ય તોઢી પુષ્કર કરે.

6. શ્રેષ્ઠ અલગતન તારાંઓ, તારાંતાર સમજે અને તુલના કરી શકે.

7. જુદા પકડ તંખે આ ક્રિયાના નિવૃત્તિના લેખનનું પ્રમાણ કરશે તરીકે રાજ કરી શકે.
કાર્યકેટર અને નોકરીની તક: 

1. આવી તાકીમ પામેલા વિદ્યાર્થીઓ અધેવાલ લેખન અને સંક્ષેપપીકરણ (સારીલેખન) સરળતાથી કરી શકે તેથી પટલાવના અધયાયા શેર માધ્યમમાં કેટકમાં ઉપયોગી થાય શકે.

2. ગુજરાતી ભાષા જે તે હિંદી ભાષા અથવા અંગેજ ભાષા પર કાબુ કેલાવી શકે તો અતિ વધુ અલગ કેટકમાં ઉપયોગી થાય શકે.

3. પ્ર્યુક રીડિંગના કેટકમાં, ગુજરાતી ટેનેન્ટ્સ તરીકે અને ટીપી ઓપ્રેટર તરીકેની સામગી વધારે સરળતાથી કરી શકે.

4. વિભાગ ચેનલો ઉપર ગુજરાતી સમાચાર વાંચકી અને ઉદ્યોગી તરીકેની સામગી સામાન્ય શકે.

યોજાતાની શરતો: વિદ્યાર્થીઓને અધ્યાય તમામ હંમેશા વર્ષ કેવી કોઈ પણ આપે શકે. 

શૈક્ષિક માધ્યમ: ગુજરાતી 

અવકાશકામી સંસ્થાનો: 250 કલાક 

સમસ્તને લક્ષણીકરણ 100% 

અધ્યાપન વોજનના: નમ્રતિલિનહ સામગી દ્વારા સહ્યોગ આપવામાં આવે છે.

- પાઠક પુસ્તકીકર

- TMA (શિક્ષણ અંકિત મૂળટાંકણ) 

- 30 PCP વધુવારી શિક્ષણ સંપત્તી 

- શાખાના અને વાંચન લેખનનું અધ્યાયન કેન દ્વારા સહ્યોગ 

મૂલટાંકણ યોજના

| મૂલટાંકણ યોજના | સમાન | લાંબાકાંક
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TMA</td>
<td>-</td>
<td>20%</td>
</tr>
<tr>
<td>વારસિક લેખન પરિસ્થિતિ</td>
<td>3 કલાક</td>
<td>80%</td>
</tr>
</tbody>
</table>
ઉત્તીર્થ માપદંડ: દરેક પરીક્ષામાં 33%

પુસ્તક શ્રેણી અનુસાર ગુણવત્તા

<table>
<thead>
<tr>
<th>પુસ્તક શ્રેણી</th>
<th>ગુણવત્તા</th>
</tr>
</thead>
<tbody>
<tr>
<td>પુસ્તક શ્રેણી નં - 1</td>
<td>24 ગુણવત્તા</td>
</tr>
<tr>
<td>પુસ્તક શ્રેણી નં - 1</td>
<td>32 ગુણવત્તા</td>
</tr>
<tr>
<td>લેખન વિશ્લેષ</td>
<td>24 ગુણવત્તા</td>
</tr>
<tr>
<td>વિશ્લેષ વિશ્લેષ</td>
<td>10 ગુણવત્તા</td>
</tr>
<tr>
<td>કુલ ગુણવત્તા</td>
<td>100 ગુણવત્તા</td>
</tr>
<tr>
<td>કમ</td>
<td>પાઠ્યપુસ્તક</td>
</tr>
<tr>
<td>-----</td>
<td>---------------</td>
</tr>
<tr>
<td>1.</td>
<td>પાઠ્યપુસ્તક ૯</td>
</tr>
<tr>
<td>મોડયુલ 3</td>
<td>20 કલક</td>
</tr>
<tr>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>મોડયુલ 4</td>
<td>20 કલક</td>
</tr>
<tr>
<td>મોડયુલ 5/5</td>
<td>35 કલક</td>
</tr>
</tbody>
</table>

42
<table>
<thead>
<tr>
<th>પાઠયપુસ્તકનું નંબર</th>
<th>મોડયુ કે</th>
<th>સ્થળ</th>
<th>મંડલ</th>
<th>વિભાગ</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>પાઠયપુસ્તક ૨</td>
<td>ઘડ્ડા</td>
<td>કલપક</td>
<td>કરોડી માનવ પ્રકૃતિઓ જનયાં, જવાં અને પણાંસલમબૂ તોમાં 32 ગુજરાત</td>
</tr>
<tr>
<td></td>
<td>મોડયુ કે ૮</td>
<td>લેખક (સ્થળ)</td>
<td>૩૫ કલકા</td>
<td>કરોડી માનવ પ્રકૃતિઓ જનયાં, જવાં અને પણાંસલમબૂ તોમાં 32 ગુજરાત</td>
</tr>
<tr>
<td></td>
<td>વિભાગ</td>
<td>૩૦ કલકા</td>
<td>આ લાગણમાં આપણે લેખક કોલિયા વિશેની માહિતી મેળવીએલું 14 ગુજરાત</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>વિભાગ</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
भूमिका:
संस्कृत नाम विश्वस्य प्राचीनतम भाषा। एवं भाषा अधिकांशभारतीयभाषापूर्वोपनीयभाषापूर्व जननीत्येण अथवा सम्पूर्णविनिरूपणं विराजते। एवं न्यून मूलग्रंथं: एवं भारतीयसंस्कृतं: परमेश्वर, दर्शनशास्त्र, अध्ययनशास्त्र, दितिसंस्कृतं: पूर्णपानाम, भूमिश्वर, ज्ञाति अथवा विज्ञानशास्त्रं संस्कृतभाषा नवीनशास्त्रानि निर्माणार्थम् अपूर्वाँ क्षमतां धार्मिक यस्य: उपयोग: अन्यायं: भारतीयभाषापूर्व अथवा जिन्यं। राष्ट्रियभाषानामिकशास्त्रं अन्तरराष्ट्रियभाषानामिकशास्त्रं सुदृढ़कर्मण्यं अर्थां: महत्त्वपूर्णं योगवानमणे। संस्कृतवाद्वश्च मानवविश्लेषणां संरक्षणां संस्कृतवाद्पाठयां धर्मशास्त्रां भूमिश्वर अथवा अभिन्नत्यसाध्यी विशिष्टाः।

वसुधावेद कुलसम्पूर्णं च विशेष विश्वविद्यानीति। द्वारणां अध्यायसारस्य आदिकालं: अब्दार्थसम्पूर्णं विश्वविद्या सम्पूर्णं विश्वविद्यानिः: ऐश्वर्य नामकरणां स्थापयिता। इत्यं भाषा एवं वैश्विकविद्याम् संकल्पनां सर्वप्रकरणं प्रस्तृती। संस्कृत भाषाभाषायिनी प्राचीनकालं: अद्वैतविश्व सततरूपणं प्रवहमाना वर्तित। ज्ञानात्मक साधनानि। यह एवं भाषाम् प्रकरणां सर्वप्रकरणं प्रस्तृती। व्याख्यातां नवीनशास्त्रां निरीक्षण योगानमणे अर्थां: धार्मिक यस्य: उपयोग: भाषाम्। व्याख्यातां नवीनशास्त्रां निरीक्षण योगानमणे अर्थां: धार्मिक यस्य: उपयोग: भाषाम्।

औचित्यं
उद्योगोत्सवमितिः संस्कृतभाषां पाठ्यक्रमे परित्वरणम् विश्वविद्यालयस्तरं प्रत्येकमेव अध्ययनरूपं अथवा सागरं प्रायं अंतरराष्ट्रिय अध्ययनरूपं अथवा स्वयंस्वरुपं अंतरराष्ट्रिय अध्ययनरूपं अथवा स्वयंस्वरुपं अंतरराष्ट्रिय अध्ययनरूपं अथवा स्वयंस्वरुपं अंतरराष्ट्रिय अध्ययनरूपं अथवा स्वयंस्वरुपं अंतरराष्ट्रिय अध्ययनरूपं अथवा स्वयंस्वरुपं अंतरराष्ट्रिय अध्ययनरूपं अथवा स्वयंस्वरुपं अंतरराष्ट्रिय अध्ययनरूपं अथवा स्वयंस्वरुपं

- विभिन्नशाखाः, वैद्यविभागाः, पूर्वांगिकशाखाः, अर्थां तथा अध्ययनात्मकशाखाः पूर्वोपनीय अध्ययनसाध्यात्मकशाखाः
- त्त्वभाष्यभाषाः, त्त्वभाष्यभाषाः, पूर्वांगिकशाखाः, अर्थां तथा अध्ययनात्मकशाखाः पूर्वोपनीय अध्ययनसाध्यात्मकशाखाः
- त्त्वभाष्यभाषाः, त्त्वभाष्यभाषाः, पूर्वांगिकशाखाः, अर्थां तथा अध्ययनात्मकशाखाः पूर्वोपनीय अध्ययनसाध्यात्मकशाखाः
- त्त्वभाष्यभाषाः, त्त्वभाष्यभाषाः, पूर्वांगिकशाखाः, अर्थां तथा अध्ययनात्मकशाखाः पूर्वोपनीय अध्ययनसाध्यात्मकशाखाः
- त्त्वभाष्यभाषाः, त्त्वभाष्यभाषाः, पूर्वांगिकशाखाः, अर्थां तथा अध्ययनात्मकशाखाः पूर्वोपनीय अध्ययनसाध्यात्मकशाखाः
- त्त्वभाष्यभाषाः, त्त्वभाष्यभाषाः, पूर्वांगिकशाखाः, अर्थां तथा अध्ययनात्मकशाखाः पूर्वोपनीय अध्ययनसाध्यात्मकशाखाः
- त्त्वभाष्यभाषाः, त्त्वभाष्यभाषाः, पूर्वांगिकशाखाः, अर्थां तथा अध्ययनात्मकशाखाः पूर्वोपनीय अध्ययनसाध्यात्मकशाखाः
- त्त्वभाष्यभाषाः, त्त्वभाष्यभाषाः, पूर्वांगिकशाखाः, अर्थां तथा अध्ययनात्मकशाखाः पूर्वोपनीय अध्ययनसाध्यात्मकशाखाः
- त्त्वभाष्यभाषाः, त्त्वभाष्यभाषाः, पूर्वांगिकशाखाः, अर्थां तथा अध्ययनात्मकशाखाः पूर्वोपनीय अध्ययनसाध्यात्मकशाखाः
सामान्य-उद्देश्यानि

- संस्कृतभाषायः संस्कृतवाङ्गश्च व विषये रूचिवर्धनम्;
- संस्कृतमाहित्यश्च विचित्रविश्लेषणानि परिचयः;
- संस्कृतभाषाकौशलेषु दक्षताविकारः;
- राष्ट्रियस्तरे सामाजिक-सांस्कृतिक-वैज्ञानिकधार्मिकसंवेदनाविकारः;
- आधुनिकशुद्धिमाध्यमं छात्रावां चारित्रिकविकारः।

विशिष्ट-उद्देश्यानि

शब्दाणि भावणम्

- छात्रा: दैनिचनिवारकारे शिष्यातिदायने संस्कृतस्य श्रवण समयं कुरुः;
- सरलसंस्कृते प्रश्न प्रयोगं समयं: भवेयः;
- सरलसंस्कृतप्रश्नानि गौर्णिकरूपेण उत्तरदाने समयं: भवेयः;
- वर्णां शुद्धम् उद्भारण करुः समयं: भवेयः;
- सरलसंस्कृतवाक्येपु भावप्रकाश्य शक्ता: भवेयः।

पत्रसङ्गमः

- प्रदनग्रंथांश्च, पद्यांश्च नाट्यांश्च च मौनवाचनं, सत्वरवाचनम् अथ च भावपृष्ठवाचनम्;
- पदितवांशाय अतिरिक्त वार्ता, सरलसंस्कृतं (सद्यों पद्यांश वा) पठितवा तथय भावव्याख्यानम्,
- सरलश्रीगुणान्युनिक शीलाविशेष; पठितवा मौखिकरूपेण अनुसन्धारणम्;
- भ्रमणोत्साहायो श्रुत्तिशीलविशेष; पठितवा मौखिकरूपेण क्रमनिर्देशिणम्।

लेखनमः

- युक्तिपूर्वकं वाक्यावां संयोजनम्;
- घटनात्मानुसारं लघुविवर्णसंवादलेखनम्;
- प्रदत्तपरिस्थितिनुसारं पद्धतिलेखनम्;
- अभिव्यक्ति-निमित्तव्र-व्याख्यापाणिव लेखनम्, प्राचार्य प्रति च प्राचार्यप्रतिव लेखनम्;
- प्रदत्तानि व रितर्षानुपूर्ति:;
- सरलसंस्कृते कथनमाध्यम्य प्रश्नशिलप्रमाणम्।
अनुप्रयुक्तव्याकरणम्

- देवनागरीतिपिनिकाम्, संयुक्तव्याकरणनेत्रम्, स्वरव्यंजनसंयोजनम्, शब्दानां वर्णविविधम्;
- प्रानिपदिकानां संविभाषिकप्रयोगेण वाक्यनिर्माणम्
- वर्णरूपयोजनम्, वर्णविविधयोजनम्
- कर्तृपदेन सह समुचितत्रिकयाप्रयोगः:
- विशेष्यारूपसारं विशेषप्रयोगः
- कृदन्त-तदक्तान्तपदः वाक्यनिर्माणम्
- प्रदन-अन्यायानां शून्यप्रयोगः
- समस्तपदानां विश्रामः
- संविकृतपदानां संविनिविच्छेदः
- उपपद-विभवस्मृतिप्रयोगः

अध्ययनस्य प्रयोजनम्: संस्कृतभाषा या पत्तित्वा खाता: विविधविद्यालयस्त्र विश्वलेन भाषाप्राणी अध्ययनार्थम् अवसंयार स्वभावानां विश्वविद्यालयों तथा भाषाप्रणालियों शास्त्रों शास्त्रियों नामांकनात्तो अध्ययनस्य प्रयोजनम्।

पूर्वपिण्डः आस्मात्म पाठकगमे प्रस्तुतातु पूर्व छात्र: सरल-संक्षिप्तवाक्यानां भागेण भाषणे च कृतायामसंस्कृतविविध्यम्: अस्ति। संस्कृतसाहित्यात् संक्षिप्तिं सरलग्रंथां भाषां अनुवादनं समर्थः स्वर-संक्षिप्तवाक्यानां रचनार्थम् च सजय सद्योऽस्ति। आर्यानर्थम् दूरदर्शनं न प्राप्याद् प्रसारितः संक्षिप्तकारकम् विशेषत: संक्षिप्तवाच्यां (समाचार): चापि तेन शुरूः अवशोधिते इत्यपि अपेक्ष्यते। विशेषधार्मिक द्वेषभु संस्कृतसाहित्यम् (सभापाख्याने) च तेन शुरूः पठित: च, तेषाः अवशोधिते अपि स सिद्धम्: इति आशायते।

निर्देशशास्त्राः संस्कृतम्

कालवधि: 01 वर्षम्

भारतायम्: रीढ़ान्तिक: - शतप्रतिशतम्, प्रायोगिकम्: - शून्यम्

अध्ययनयोजना

एवः पाठ्यक्रमः द्वितिया विभिन्न-केंद्रिकपाठ्यक्रमः वैद्यप्रेयकपाठ्यक्रमः। केंद्रिक-पाठ्यक्रमः सवीं छात्रां: समानस्पर्श विशेषण पठनीयः। वैद्यप्रेयकपाठ्यक्रम विशेषतः प्रभावितः। तत्र वस्त्राणिं एवं विद्यानुसार अध्ययनस्य अपेक्षितं वर्तते।

क केंद्रिक-पाठ्यक्रमः - विभिन्न, भारतायम्, भाषणम्, पत्तनम्, तेशनम्, अनुप्रयुक्त व्याकरणम्

ख वैद्यप्रेयक पाठ्यक्रमः: (क) संस्कृत संस्कृतित्रो (ख) प्रयोजनमुलक संस्कृतम्

संस्कृतय पाठ्यक्रममें यह निर्देशित विविधतामयी राम्यतिता भवेत्।
1. 3 मुद्रिताओं पुस्तकामी।

2. श्रवणामी श्रवणामी (क्रेनट) मानुषुमानुषके - (ती.डी. रोम) रूपेन्द्र आकाशवाणीमानवी च कार्यक्रम प्रसारण उद्योगके रूपमें प्रविष्टमान सामग्री भवेन्द्र।

3. 30 समयकथा।

मूल्यांकनगोष्टि:

1. श्रवणामण्डकौशलपरीक्षण समयकथा आयोजिताणा पात्रत्वशीर्षीणा माध्यम मनोरंजन मत्तिकांति।

2. अनित्यपरीक्षण एक्षप्रशंसा शतांत्रकाणा भविष्यमी। अनित्य प्रशंसा 85 अद्वकृनाम अक्षेपकारकपरीक्षण मनोरंजन। अद्वकृनाम तीनक्रमीपाठकमे विकल्पम्यं मनोरंजन। छात्राः केन्द्रमु एकत्री एवं अंशीय प्रशंसा कार्यमु अमाकणानं करणीयमु।

3. समयकथा शीर्षण श्रवण-अनित्यमूल्यक्षणपरीक्षण मनोरंजन। श्रवणामण्डकौशलपरीक्षण मूल्यांकन भविष्यमान माध्यमकार्यकर्तारमध्यम अध्यक्षके छात्राः समयकथा माध्यमकार्यकर्तारमध्यम अध्यक्षके अनित्यपरीक्षण मूल्यांकन एवं क्षेत्रपर (मेडिंग) प्रणाली मनोरंजन मनोरंजन। उपायिताणा अद्वकृमु शृंखलाकाण्डां प्रदर्शणमु।

उत्तीर्णता मानदण्ड: 33%

पाठ्यांशः

पुस्तकाण्डः

<table>
<thead>
<tr>
<th>क्र. सं.</th>
<th>मुख्यविषयः</th>
<th>कालावधि</th>
<th>औचित्यमु/विवरणमु (रैल्यांतिकः)</th>
<th>औचित्यमु/विवरणमु (प्रायोगिकः)</th>
<th>भारांश (अंकः)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. के. केन्द्रक-पाठ्यक्रमः</td>
<td>प्रथम:  खण्डः - श्रवणमु-भाषणमु (भृदीवल्ल्यांकनमु) । 'भाषा' धारणा: निश्चित: एष शब्दः 'भाषा' दशमी । याबद्ध: भाषामु न भाषणे ताबद्ध: भाषणा: समस्त रास्ते न मनोरंजन। भाषणमु: द्विप्रथम कौशलकृ त: श्रवणमु। याबद्ध: भाषा न शृंखला ताबद्ध: भाषणकामता अश्व न लक्ष्यते। अतः समयकथा आचारण सह: अश्व च प्रस्तावस्य छात्राः: संस्कृतमानवाणा</td>
<td>210 होरा</td>
<td>केन्द्रकपाठ्यक्रमे संस्कृतभाषामें अभिव्यक्ति भाषणकार्यनां विकर्षण, संस्कृत- साहित्यकोशस्य विविधतायाम भाषाध्यक्षाय न्यायिकार्य तथा सामग्री भविष्यति। अनित्यनु पाठ्यक्रमस्थि चतुर्कारः: खण्डः: स्त्रिया।</td>
<td>85</td>
<td></td>
</tr>
</tbody>
</table>
सामान्यवार्तालाप: अपेक्षायो।
आकाशवाण्या: दूरदर्शिनात्
प्रसारितकार्यक्रमानु युद्धा हृद्वृत्ता च
च्छावा: सम्पर्कुपोषण तानु: अवभावःच्छेदुः
इति कारणाचार्य संस्कृतिभाषायां
अवभव:भाषण-अभयाः: अपेक्षान्यां

हि: प्रार्थित्युपदेश: खण्ड:

पठनम् (अक्षर: 20)

पठनेन वय ज्ञातस्य उपार्जीन कुमेः।
पठनेन भाषानां परिशुर्द्ध: जायते
चिन्तनमनननक्षमता
सर्जनस्यकाशक्रियापिवश्चेत। तदनु
आज्ञ्यगोऽन्यं अथांकृ शङ्कराः:
दृष्टिबन्धनै। अस्स्माथि: गामादिवद्
वन्तवः पर राजसहितस्त्र-इति
विवेकः उपवयम्। संस्कृतवाच्यवस्था
परिशुचेन आयुर्मीरवादुत्रृतिः: जायते।
पठनेन जिम्मासा वध्रास्थो पुतः
अधिकाधिका पठनप्रृतिः: न जायते।

• ग्रामपाठ: (अक्षर: 20)
  अर्थमन् पाठवकमे नव-ग्रामपाठा:
  भविष्यन्ति।
  अपठित-अवभोधनाय
  अनुसरितानामः

• पाठपाठ: (अक्षर: 10)
  अर्थमन् पाठवकमे अष्टपाठा:
  अपेक्षाः:।

• नाभाग्यांश: (अक्षर: 10)
  अर्थमन् पाठवकमे - नलवार: पाठा:
  योजिता:।

• अपठितम् (अक्षर: 10)

• ग्रामव्रोधनम् - (अक्षर: -5)

48
- पद्मावतीव्रोधम् । (अंकम: -5)

निश्चितं पाकरसाम्यं परिणामसः पद्मावतीकोषं एवतः प्रवा प्रजायते युधिष्ठिरी श्रीमति अपरिणामसः साम्यं (ग्रामांकः पद्मांश्रवणम्)

तरया: भावभूषाने साधने स्थापत।

तस्मात्मान्त्रम: विविधे: पाठे: सह एव क्रियते, परं मृत्युऽणं न ते प्रयोग: विशेषः तत्र तु रत्नानुलोकः अपरिणामसं एव दीयते।

तृतीयः खण्डः

लेखनम् । (अंकम: -20)

लेखनम् अभिमानात्मकं कौशलम्।

अभाव महत्मम् अभावार्द्ध भावानां

विचारणां च अभिम्यति: भवेत्।

लेखनं एव शब्दात्

साधुप्रयोगमाहं संवर्धिते।

विविधविधाम् लेखेने

साधनात्मकशिर्किनः अभि भवेत्।

देवनन्दनः भवारे साध्यान्ति

साधनप्रेषणार् सूचना प्रदानार्थ च लेखनमाहं ।

क्लेशं सर्वत्रिधेयं व्यक्तियुक्तके मणि प्रस्तोतुं शक्यति। विसर्जनितानां सम्बन्ध प्रयोगः कर्तृं शक्यति।

- पत्रलेखनम् । (अंकम: -5)

- लघुनिमवलेखनम् । (अंकम: -15)

- संवादलेखनम् । (अंकम: -5)

चतुर्थः खण्डः - अनुप्रयुक्त व्याकरणम्

(अंकम: -15)

व्याकरण भाषाम् अन्वेषि। व्याकरणम्य सिद्धान्तानाम् व्यक्तिवशस्यमिति।
शिक्षणम् अन्न उद्धेिण्य नासित्।
पाल्वसामग्रीम्
अधिकृत्ये ते शे उत्तरणलियमा:
सिद्धान्ता: वा अपेक्षिताः तेषां विवेचनं
तन पाठे एवं क्रियते। एवं हि
शिक्षाधिन: सरलतया भाषायां
व्याकरणनियमानां, सिद्धान्तां च
व्याख्यारिकप्रयोगं करतुम् अपि
जाननि।
• सन्नि: - पाठे प्रयूक्तानाम्
  सन्निधिवृवृधपत्रानां सन्निधिवृवृधपत्रानां
  बा, सन्निधिकरणाम्
• शब्दरूपाणि - पाठे प्रयूक्तानाम्
  अपि न तत्सन्दरूशशब्दानां
  रूपपरिचयः:
• सर्वनामानि - सर्व, यत्, तत्, किंपु,
  इदम्, अद्यः, (सर्वेचु लिङ्गेणु)
  अन्यां, युपदृ भवतUILD
• संख्यावाचक: शब्दा: 1 -100
  (एकति: शर्त अवर्णित)
• संख्यावाचक - शब्दानां रूपाणि
• धातुरूपाणि
• वाच्यम्-वाच्यपरिवर्तनम्
• उपसर्गाः-प्राद्य: उपसर्गाः:
  (पाठ्यपुस्तके प्रयुक्ताः)
• प्रश्नाः - 
  आधृतिलिखिनप्रश्नायुक्तशब्दानां
  भाषायां प्रयोगः:
i. खीर्ष्टत्त्वाः - ग्राप्प (आ), ग्रीपू/ग्रीपू
  (ई)
| 2 | ख. वैद्यिकपाठाक्रमः | (अड़का: 15) | 30 होरा | भारतीय संस्कृतिः<br>मूलतः संस्कृताध्यात्मः<br>अस्मां जीवनधाति,<br>परम्परा-,<br>वैज्ञानिकता-,<br>साहित्यमुनि<br>संस्कृतवाक्योऽन्तः<br>सम्बद्धता,<br>व्यवस्थाः<br>विशेषतः शब्दिकाः<br>वैज्ञानिक-भारतीयम्<br>मुनि अभिभाषित: | 15 |
|---|---|---|---|---|
| 2 | ख. वैद्यिकपाठाक्रमः | (अड़का: 15) | 30 होरा | भारतीय संस्कृतिः<br>मूलतः संस्कृताध्यात्मः<br>अस्मां जीवनधाति,<br>परम्परा-,<br>वैज्ञानिकता-,<br>साहित्यमुनि<br>संस्कृतवाक्योऽन्तः<br>सम्बद्धता,<br>व्यवस्थाः<br>विशेषतः शब्दिकाः<br>वैज्ञानिक-भारतीयम्<br>मुनि अभिभाषित: | 15 |
| 2 | ख. वैद्यिकपाठाक्रमः | (अड़का: 15) | 30 होरा | भारतीय संस्कृतिः<br>मूलतः संस्कृताध्यात्मः<br>अस्मां जीवनधाति,<br>परम्परा-,<br>वैज्ञानिकता-,<br>साहित्यमुनि<br>संस्कृतवाक्योऽन्तः<br>सम्बद्धता,<br>व्यवस्थाः<br>विशेषतः शब्दिकाः<br>वैज्ञानिक-भारतीयम्<br>मुनि अभिभाषित: | 15 |
| 2 | ख. वैद्यिकपाठाक्रमः | (अड़का: 15) | 30 होरा | भारतीय संस्कृतिः<br>मूलतः संस्कृताध्यात्मः<br>अस्मां जीवनधाति,<br>परम्परा-,<br>वैज्ञानिकता-,<br>साहित्यमुनि<br>संस्कृतवाक्योऽन्तः<br>सम्बद्धता,<br>व्यवस्थाः<br>विशेषतः शब्दिकाः<br>वैज्ञानिक-भारतीयम्<br>मुनि अभिभाषित: | 15 |
| 2 | ख. वैद्यिकपाठाक्रमः | (अड़का: 15) | 30 होरा | भारतीय संस्कृतिः<br>मूलतः संस्कृताध्यात्मः<br>अस्मां जीवनधाति,<br>परम्परा-,<br>वैज्ञानिकता-,<br>साहित्यमुनि<br>संस्कृतवाक्योऽन्तः<br>सम्बद्धता,<br>व्यवस्थाः<br>विशेषतः शब्दिकाः<br>वैज्ञानिक-भारतीयम्<br>मुनि अभिभाषित: | 15 |
| सूत्रकलायामु मापी  |
| संस्कृतमन्त्रयः नाद्यायः न  |
| प्रभावः स्पष्टः परिलक्षयते। अतः  |
| एवं नामिकनिनं संस्कृतं  |
| भारतीयसंस्कृतं: आधार दत्तेः  |
| वदनिः। इमामु उदात्तपरम्परामु  |
| अवबोधितसं संस्कृतभाषाजानं  |
| परमावश्यकम्।  |
| • प्रस्तावना  |
| • संस्कृतं तथा अन्यः: भारतीयः  |
| भाषा:  |
| • भारतीयज्ञानविज्ञानपरम्परा  |

(ii) प्रयोजनमूलकं संस्कृतम्  |
| अभिक्रियकत्वाध्यायपदवत्तुतुसाराम्  |
| अस्य पाठ्यमात्राय प्रस्तुतिः  |
| भविष्यति। मुक्तशिक्षावादाध्याय  |
| शैवमाध्यमेत प्रस्तुति: करिष्यते।  |
| प्रूफीडिंग चिह्नितां परिचयः  |
| प्राथमिककार्यरूपं कार्यिष्यते।  |

| प्रैदेशिकभाषागु अपि  |
| संस्कृतय प्रभावः  |
| सालक्षयते।  |

| अध्यात्मिये भारतः  |
| अनेकः प्रज्ञातिः  |
| बहुनि पुरुषकारिः च  |
| संस्कृतभाषायां  |
| प्रकाशयते।  |
| करयविच्छंदिः लेखरथ  |
| प्रकाशनात् पूर्व  |
| मुद्रणविधाने-  |
| अशुद्धिः मिराकरणं  |
| भाषामिश्रणं च  |
| नितान्तम् आवश्यकम्।  |
| अतः एवं  |
| प्रकाशनविभागमेवु  |
| अशुद्धिसाधोधिकर्षण पदः  |
| भविष्यति। शिखरार्किः  |
| तर्प कौशलं जानन्तु  |
| तदं विज्ञ: च भवन्तु  |
| हति अपेक्षा।  |

| 240 होरा  |
| 100 अंकः  |
पंजाबी मीटियर मैट्रिक्स पेपर (310)

नाट-पहाड़िः - पिकाचे मिनिकुरबींड़ पंजाबी दै मीटियर मैट्रिक्स पाठ-सं पिंग

मज़ेड़ा सागर हो दिख आपढ़ी आवश्यक है मशीन रेलवे चालक हार्ड धड़ चढ़ दिखी है ढीलिंग पंजाबी मागवढ़ ठांग डॉंग डॉंग टेलीफोन का सामान है जा आप की हर दिन दि
पाठ्य भाग ही नियोजित न हो लिए वाणिज्यिक लिए वित्त वाणिज्यिक Tutor Market Assignment (T.M.A.) अभध्याय वित्तकल्याण की भाषा गरी Term End Examination (T.E.E.) Public Exam. कल्याण। धर एक सिंधिशास्त्री रड गरी वाणिज्यिक वरकर सहाय गरी कल्याण। उक्तके दिन संभ मिले अअरमान Term End Examination (T.E.E.) Public Exam.

कल्याण दिन अनाही गरी। ने 8 अच्छे 9 विभक्तियों वाणिज्यिक (Optional Module) गरी।

मिलिशनापारे दुर्गे कल्याण दिनै दिनै दिनै दिनै दिनै दिनै (8 अच्छे 9 विध) वाणिज्यिक ने युक्ति गला वरकर सहाय गरी। अभध्याय दिन कल्याण वीणा विभा है लिए दुर्गे TEE दिनै गरकर बाट मगे, ने अमी TMA ने TEE हूँ दिंका-दिंका बाटले अभध्याय उभी लब मगे। दिन भेंट,अलोक,उपाय, तर तिबिबल छिप्छिप्छि है। तै दुर्गे दिनै टल दिनै हेरर हूँ दिनै गरिलें।

मैंने दिनै

54
4. हिचहः :-

(i) मुख्यतः यापत ने गुरुसद बीयर समस्ता जेलाफा (मुख्तार, वजसदा, दसहरा, शिकाला) से दिच्चिम वर वरह अने मित्रदलबा मरे आफतसङ्ख्या दिराफकीत से मृत-मृत समस्ता डराह।

(ii) प्राकृतिक बमा दे दिनाकर हँ माहि कहे माहि दे कूदें सूढ़ी दीिमानु अने मध्ये टटगील बचानी दे दिच्चिम डराह।

(iii) केदार विश्ववी लिंग बमा दसी अपने दिच्चिम येंस बचाहे माहि दे कहे माहि वर्तु महा दे दिच्चिम वरह हँ दीिमानु सी धामादी भुक्कना दे दिच्चिम डराह।

(iv) प्राकृतिक बमा दे दिनाकर उत्तरवर्तु हँ अने माहि कहे माहि अने हिदम हँ दिनाकर मृती मुहुँ वर्तु महा, हिदम वाघवाह लिंग वाघवाह विलासरं डराहे मध्ये प्राकृतिक लिंग ना डराह हँ।

5. विकल्पा अते देववती दे वापस

मृत-मृत संबंधः :- मीरामण मेजङ्गी वंश क्षिति दुचकल केंद्र दाले किरिकारावी लिमे उच डब अपने सिस्को अने हँ दीिमानु हँ दामा दसी येंस बचाहे मरे आफत बरह हँ डराह।

हँ आफत दीिमानु हँ अपने दिच्चिम हँ हिदमान टेट लिंग वेली भर्त बरह हँ। हँ दामा दे मृत-मृत संबंधः हँ कसाद नंगे दे उच उत्तर अने नंगे वेली, टेलीमन्त, टेलीमन्त नंगे वेली नंगे सापता दसी उदार हँ डराह। हँ विकल्पा विकल्पा नंगे प्राकृतिक बमा ना भागवाह वाघवाह दे विकल्पा वाघवाह दे विकल्पा वाघवाह वरह डराह हँ।
6. मैंकंडली - धाम
जोगाउँ लटी मजबूत :-

7. वस्त्रांत (बुजूर्ख) सा अभिमान - खंचाखी

8. जुघायी सा महां - 295 छंटे

9. भंड - 100

10. भतुष्की दी गेछना लिखडी मांग छंटे अभिभावक तिलासांप्रय लेख

11. भण्डलट दी जेंसना लिखडी पेटल भंड : 100

12. धाम भारसौं : 33%
11 (३) भूमिका दी शेषनात

समस्त एक भूमि पंडत (संभालन मैंकली पंडत) दुर्गाकी साथवाली लड़ी हमेशा तल्ला वि
भूमिका हिस्से का मेंविला गैंगिया मिलिएम 2013-2014 दे अभिल लिख आवाम वै के तसी
लड़ी लड़ी भाग भूमि पंडत विभाग लड़ी वाली है दे। सभी मिलिएम में भूमिका भभिक्षा चबाके
श्रद्धा पंडत दिव्य वृद्ध जवालों की आदीनाथ श्रद्धा। दुर्गाकी लड़ी लड़ी हमेशा जा भूमि पंडत
अंदं-अंदं राधा दिंगु सा विधि है। तसी के भाग राह दुर्गाकी भभिक्षा लड़ी विभाग राह
मलेहो। दिये दिये सा चे हमेशा दे भूमि-पंडत दिव्य वृद्ध जवालों भभिक्षा पंडत श्रद्धा राह दिंगु
रूढ़।

भूमि दी बिट्टी अर्धे अर्धे दिव्य वृद्ध जवालों दे दिंगु दिंगु रूढ़। राह दुर्गाकी लड़ी
तसी हमेशा पंडत दिव्य वृद्ध जवालों दे परिस्थिति युद्ध-दीवं राह दिंगु दिंगु सा विधि है।
तसी तल्ला दुर्गाकी मंदुक्त दिंगु दिंगु राह दिंगु दिंगु राह दिंगु।

दुर्गाकी दी रास्ते पतो-पता दुर्गाकी हुई। दुर्गाकी दी भूमि पंडत हुई। दुर्गाकी दी भूमि
पंडत दे दिंगु दिंगु राह दुर्गाकी हुई। अभाल दिलिख मिली। दिया दिया ही मरमिखा दे उंग लड़ी दे
विनिर अंदं-अंदं, अंदं-अंदं राह दिंगु दिंगु राह सके हैं।
11 (ਸ) ਰ੠ੂੰਦੇ ਸੂ ਪ੃ਸਲਾਂ ਬਾਲਾ + 2

ਦੀਗਾ : ਪੋਲੀਸੀ ਸ਼ਹਿਦ : ਮੀੜੀਅਤ ਫਾਲੀਆਂ

ਗੁਲ ਭੇਲ : 100 
ਸਾਨਾ : 3 ਘਿੱਟ

<table>
<thead>
<tr>
<th>1. ਕਾਸ਼ਤਕਰਾਮ ਭੇਲ ਬੰਟਰ</th>
<th>ਭੇਲ</th>
<th>ਪੂਜਿਸਲਾਂ</th>
</tr>
</thead>
<tbody>
<tr>
<td>ਸਗਿਆਤ ਤੇ ਝੋਂਖਾਂ</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>ਸੁਖ-ਸੁਖ ਸੰਨਗਣਿਆ</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>ਲਿਖਤੀ-ਲੇਸਲਾਂ</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

2. ਪ੍ਰੋਸਲ ਤੇ ਪ੍ਰੋਸਨੇ ਤੇ ਸਹੀਅਤ ਤੇ ਪ੍ਰੋਸਲ

<table>
<thead>
<tr>
<th>ਪ੍ਰੋਸਲ ਤੇ ਪ੍ਰੋਸਨੇ</th>
<th>ਪ੍ਰੋਸਲ ਤੇ ਸਹੀਅਤ</th>
<th>ਪ੍ਰੋਸਲ ਤੇ ਸਹੀਅਤ</th>
<th>ਪ੍ਰੋਸਲ ਤੇ ਸਹੀਅਤ</th>
<th>ਪ੍ਰੋਸਲ ਤੇ ਸਹੀਅਤ</th>
<th>ਪ੍ਰੋਸਲ ਤੇ ਸਹੀਅਤ</th>
</tr>
</thead>
<tbody>
<tr>
<td>ਪ੍ਰੋਸਨੇ ਦੇ ਪ੍ਰੋਸਨੇ (ਅਵਾਂ ਦੇ ਪ੍ਰੋਸਨੇ)</td>
<td>8</td>
<td>1</td>
<td>8</td>
<td>16 ਮਿੰਟ</td>
<td></td>
</tr>
<tr>
<td>ਪ੍ਰੋਸਨੇ ਦੇ ਪ੍ਰੋਸਨੇ 30-40 ਮਿੰਟ</td>
<td>10</td>
<td>1</td>
<td>10</td>
<td>24 ਮਿੰਟ</td>
<td></td>
</tr>
<tr>
<td>ਪ੍ਰੋਸਨੇ ਦੇ ਪ੍ਰੋਸਨੇ 100-125 ਮਿੰਟ</td>
<td>3</td>
<td>5</td>
<td>15</td>
<td>24 ਮਿੰਟ</td>
<td></td>
</tr>
<tr>
<td>ਪ੍ਰੋਸਨੇ ਦੇ ਪ੍ਰੋਸਨੇ 150-175 ਮਿੰਟ</td>
<td>2</td>
<td>8</td>
<td>6</td>
<td>20 ਮਿੰਟ</td>
<td></td>
</tr>
<tr>
<td>(i) 200 ਮਿੰਟ ਪੇਸ</td>
<td>1</td>
<td>10</td>
<td>10</td>
<td>15 ਮਿੰਟ</td>
<td></td>
</tr>
<tr>
<td>(ii) ਅਕਸਰ ਤੜ੍ਹ ਪੇਸ</td>
<td>1</td>
<td>6</td>
<td>6</td>
<td>12 ਮਿੰਟ</td>
<td></td>
</tr>
<tr>
<td>(iii) 100-125 ਮਿੰਟ (ਸਾਡੇ)</td>
<td>3</td>
<td>5</td>
<td>15</td>
<td>30 ਮਿੰਟ</td>
<td></td>
</tr>
<tr>
<td></td>
<td>52</td>
<td>100</td>
<td>165+15=</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 15 ਮਿੰਟ ਪ੍ਰੋਸਨੇ ਦੇ ਪ੍ਰੋਸਨੇ ਸਤਿਕੀ

3. ਦਿਆਂਤ ਭੇਲ ਬੰਟਰ

<table>
<thead>
<tr>
<th>ਭਾਣਕਰੀਕ (ਦਿਆਂਤੀ)</th>
<th>ਭੇਲ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ਦਿਆਂਤਕਰ ਤਾਲ</td>
<td>20</td>
</tr>
<tr>
<td>2. ਚਿਤਰਾ</td>
<td>15</td>
</tr>
<tr>
<td>3. ਪ੍ਰਗਿਆਰ ਤਾਲ</td>
<td>10</td>
</tr>
<tr>
<td>4. ਚਿਤਰਾ</td>
<td>10</td>
</tr>
<tr>
<td>5. ਪੋਲੀਸੀ ਕੇਲ ਪਾਲ</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>6. टिलंडजी</td>
<td>10</td>
</tr>
<tr>
<td>7. भीडीआ</td>
<td>10</td>
</tr>
<tr>
<td>8. अडुस्तुर (तृष्ण) धेमफ्ली मलेम</td>
<td>15</td>
</tr>
<tr>
<td>9. धेमफ्ली मलेम</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>
| संख्या | विषय | अंतर्गत | विषय का विस्तार | पूर्वकालीन विषय की लैंडरी | अंतर
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>बाणा</td>
<td>60 घंटे</td>
<td>(४) बाणा विशिष्ट</td>
<td>(अ) पंजाबी बाणा के विवाद के बारे में लिख</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>लिखा गया है पूरा के, पंजाबी बाणा के बारे में लिखा गया है पूरा के</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>कानून के कारण में मतलब</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>* पंजाबी बाणा के पूर्वकालीन</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>* माहौल कहा वाले</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>* माहौल कहा वाले</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>* विहारी उल्लास की निर्देशों का कहा</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>* विहारी उल्लास का</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>* क्षेत्र उल्लास के क्षेत्र सीमाएं विरामां</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(अ):</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>* क्षेत्रवाद</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>* उन्द्र तबला टीमी विरामां, उन्द्र तबला</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>* लेख</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>* लेख सीमाएं विरामां</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>* लेख लेख लिखल के हुल्लें</td>
<td></td>
</tr>
<tr>
<td></td>
<td>लिंग</td>
<td>छापे</td>
<td>गायन (माध्यम गीत हुल्लू), गलेंदू (बड़ा पेड़ ढलीर), गलेंदू (बड़ा पेड़ ढलीर) नहीं महंत बुधी लिखूँ गान छापे (लौँ रक्तव छेड़), मिहंसा मर्गिण (भील), सम्बल भंसलू दे (पु. भंसल सिंह), चन्द्रमा मान (अंबिका प्रीतम), पनसाह (डुकशीची माणड़), आदेश सो वेळ उठाही (प्र. मणिपा)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>लाली</td>
<td>25 छापे</td>
<td>दुःख, पेघी छे निखारहे, खुशी, वहमाब</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>बांधुल</td>
<td>25 छापे</td>
<td>मछौं पृथ्वी, मेंदे दाँडी नी, अँगबु, वेन चड़ोय लिंदुजुर बुँदँ, भंवरा दी दुःखीं, हैनूल मिठिला मियां</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>पंसाली</td>
<td>20 छापे</td>
<td>पंसाली लेख पाण</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>दिलाली</td>
<td>20 छापे</td>
<td>ढाढी ढूंढींगा भी</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>तीनबीता</td>
<td>25 पृष्ठे</td>
<td>तीनबीता</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>अलूहत</td>
<td>40 पृष्ठे</td>
<td>अलूहत बल्ला अने सिखिमबल, नापाबीता अने महत्त्व, सभित्र अने लॉकल अलूहत</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>भेंसाई</td>
<td>40 पृष्ठे</td>
<td>महबाबी</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>भेंसाई मिठेमा</td>
<td></td>
<td>भेंसाई मिठेमा</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>पंचभीमा प्रसूचल जीवन दिन कीमत भेंसाई</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>भेंसाई लाटता अने हामिल</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>बुल टॉप</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Mathematics
Code No. 311

Introduction
Mathematics is an indispensable subject area in the school education because of its wide application in our day today activities as well as in different fields of education. Access to quality education in mathematics is very important for every individual. Mathematics is considered to be a system of logic. It is the subject of systematic study of quantitative phenomena around us. It is based on certain logical connotation of numbers and integral part of human civilization. Mathematics is a creative activity and is one of the most useful, fascinating and stimulating divisions of human knowledge. It is a process of managing and communicating information and has the power to predict and provide solutions to practical problems as well as enabling the individual to create new imaginative worlds to explore. We use Mathematics in everyday life, in science, in industry, in business and in our free time. Mathematics education is concerned with the acquisition, understanding and application of skills. Mathematical literacy is of central importance in providing the learner with the necessary skills to live a full life as a child and later as an adult. Society needs people who can think and communicate quantitatively and who can recognize situations where Mathematics can be applied to solve problems.

Rationale
Mathematics is an important discipline of learning at the Senior Secondary stage. It helps the learner in acquiring decision making ability through its applications to real life both in familiar and unfamiliar situations. It predominantly contributes to the development of precision, rational reasoning and analytical thinking. The Senior Secondary stage is most crucial where learners for the first time move towards diversification. At this stage, the learners start thinking, taking important decisions concerning their future career by choosing suitable courses. It is the stage, from where learners would either go for higher academic education in Mathematics or for Professional courses or it may be the end of their academic career. One of the basic aims of learning Mathematics at Senior Secondary level is to be developed problem solving skills and quantificational experiences around the learners. The idea is to allow the learner to realize how and why Mathematics is all around us. In view of these facts, it is important to make Mathematics Education at this level broad based and meaningful. The revised curriculum in Mathematics has been designed to meet the needs of diverse learners.

Objectives
After completing this course, learner will be able to:
• describe basic concepts, facts, principles, terms, symbols and processes of Mathematics;
• convert the word problems in to the mathematical forms and solve them;
• explain different ways of processing the given data and help for arriving at conclusions;
• express the skills of quantification of experiences and make linkage with day-today life;
• solve wide variety of mathematical problems in daily life and reflect in different context of learning; and
• relate mathematical knowledge and skills to solve variety of problems and develop positive attitude towards Mathematics and its application.

Scope and job opportunity
This field has a large number of opportunities for employment in different profession, some of these are: Engineering, Architecture, Statisticians, Banking, Econometrics and other professions involves Measurement and Calculation.

Eligibility conditions
Age: 15 years
Qualification: 10th Pass
Medium of instruction: Hindi, English, Urdu, Bengali, Gujarati and Odia medium.
Duration of the course: 1 Year
Weightage
Theory: 100 Marks
Tutor Marked Assignment (TMA): 20% Marks of the Theory
Scheme of studies: Theory (300 hours) and TMA (Self paced)
Scheme of evaluation: The learner will be assessed through Continuous and Comprehensive Evaluation (CCE) in the form of Tutor Marked Assignment (TMA) as well as Public Examination. The following table shows the details:

<table>
<thead>
<tr>
<th>Mode of evaluation</th>
<th>Syllabus/Contents</th>
<th>Duration</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutor Marked Assignment (TMA)</td>
<td>All Contents under SLM Part-1.</td>
<td>Self Paced</td>
<td>20%</td>
</tr>
<tr>
<td>Public/Final Examination</td>
<td>All Contents under SLM Part-2.</td>
<td>3 Hours</td>
<td>80%</td>
</tr>
</tbody>
</table>

Pass criteria: 33% Marks

Course content

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Module/Topics</th>
<th>Duration (in hours)</th>
<th>Module Approach/Description</th>
<th>Weightage (marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Module-I Sets, Relations and Functions</td>
<td>30</td>
<td>Sets and functions are the most fundamental concepts which together constitute the foundation of Mathematics. These two</td>
<td>Assessed through TMA</td>
</tr>
<tr>
<td>1. Sets</td>
<td>fundamental concepts are used in different branches of Mathematics. This module will motivate you to understand different concepts and definitions of sets, relations and functions defined on sets of real numbers. It is of great importance for learners to be able to relate the functions to trigonometric ratios. This module will help to learner in grasping many properties about relations and functions. Further this knowledge will help to understand trigonometric functions, trigonometric identities and values of trigonometric functions for different angles to solve trigonometric equations, use of Sine and Cosine rules to find the angles and sides of a triangle and to understand the graph of trigonometric functions.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Relations and Functions-I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Trigonometric Functions-I</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Trigonometric Functions-II</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Relation between Sides and Angles of A triangle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Module- II</th>
<th>Assessed through TMA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sequences and Series</strong></td>
<td>15</td>
</tr>
<tr>
<td>1. Sequence and Series</td>
<td></td>
</tr>
<tr>
<td>2. Some special sequences</td>
<td></td>
</tr>
<tr>
<td>Module</td>
<td>Topic</td>
</tr>
<tr>
<td>--------</td>
<td>-------</td>
</tr>
<tr>
<td>3.</td>
<td>Module –III Algebra-I</td>
</tr>
<tr>
<td>4.</td>
<td>Module-IV Co-ordinate Geometry</td>
</tr>
</tbody>
</table>
|   | 15. Circles  
|   | 16. Conic Sections | you can represent a point in a plane by an ordered pair of real numbers, called coordinates of the point, and a straight line or a curve by an algebraic equation with real coefficients. You can use algebra advantageously to the study of straight lines and geometric curves which reveal their nature and properties. The curves known as conics were named after their historical discovery as the intersection of a plane with a right circular cone. In this module you will learn the intersection of a plane with a double napped right circular cone results in different types of curves. You will also understand the standard equations of parabola, ellipse and hyperbola and circle and will study their simple properties. |
|   | 5. Module-V  
|   | Statistics and Probability  
|   | 17. Measures of Dispersion  
|   | 18. Random experiments and events.  
|   | 19. Probability | Statistics is one of the fundamental areas of Mathematics that is applied across many disciplines and is useful in analysis in industrial production, market etc. The study of statistics produces statisticians that analyze raw data collected from the field to provide useful insights about a population. The statisticians provide concrete backgrounds of a situation that helps in decision making. The most common measures of variability for quantitative data are the variance; its square root, the standard deviation; the statistical range; inter quartile range; and the absolute deviation. On the other hand, the study of probability helps decision making in government agents and organizations based on Assesssed through TMA |
the study of the field of Linear Algebra will equip you with the requisite background knowledge and understanding which will enable you to understand such topics as simple linear equations and their solutions; vectors and operations on vectors; matrices and operations on matrices. Matrices are used in a large number of disciplines. In this module you shall learn about matrices and shall confine yourself to the study of basic laws of matrix algebra. You shall also understand the concept of elementary row and column operation and invertible matrices. In this module you shall learn about determinants, their expressions, minors and cofactors, their elementary properties, applications of determinants in finding the area of triangle, adjoint and inverse of a square matrix, consistency and inconsistency of system of linear equations and unique solution of linear equations in two or three variables using inverse of a matrix.

<table>
<thead>
<tr>
<th>6.</th>
<th>Module-VI</th>
<th>30</th>
<th>The study of the field of Linear Algebra will equip you with the requisite background knowledge and understanding which will enable you to understand such topics as simple linear equations and their solutions; vectors and operations on vectors; matrices and operations on matrices. Matrices are used in a large number of disciplines. In this module you shall learn about matrices and shall confine yourself to the study of basic laws of matrix algebra. You shall also understand the concept of elementary row and column operation and invertible matrices. In this module you shall learn about determinants, their expressions, minors and cofactors, their elementary properties, applications of determinants in finding the area of triangle, adjoint and inverse of a square matrix, consistency and inconsistency of system of linear equations and unique solution of linear equations in two or three variables using inverse of a matrix.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>Module-VII</td>
<td>30</td>
<td>In this module you will learn about reflexive, symmetric, transitive and equivalence relations.</td>
</tr>
<tr>
<td>Functions-II</td>
<td>You will also learn about the composition of functions and their different properties. This module will help you to test the bijectivity of functions and to find the inverse of any function. The binary operations like addition and multiplication constitute the set of real numbers as one of the most familiar algebraic structure. You will be able to find identity element and inverse of an element of a set. You will also study about inverse trigonometric functions, its domain, and range and simplify expressions involving inverse trigonometric functions. The inverse trigonometric functions play a very important role in calculus and are used extensively in science and engineering.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>----------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Inverse Trigonometric Functions</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8. Module-VIII</th>
<th>Calculus is an important part of Mathematics at senior secondary level. This module begins by introducing the concept of limits. The concept of limit leads to understand the concept of continuity of elementary functions. In this module, you will learn about the basic concept of the derivative and integral functions. Derivatives have a wide range of applications in various fields and disciplines. You will learn that how derivative can be used to determine the rate of change of various quantities. you will also understand that integration and differentiation are inverse operations. You will come across two types of problems in integrals i.e. problem of finding a function whose derivative is given and problem of finding the</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculus</td>
<td>25. Limits Continuity</td>
</tr>
<tr>
<td></td>
<td>26. Differentiation</td>
</tr>
<tr>
<td></td>
<td>27. Differentiation of Trigonometric functions</td>
</tr>
<tr>
<td></td>
<td>28. Differentiation of exponential and Logarithmic functions</td>
</tr>
<tr>
<td></td>
<td>29. Application of Derivatives</td>
</tr>
<tr>
<td></td>
<td>30. Integration</td>
</tr>
<tr>
<td></td>
<td>31. Definite Integrals</td>
</tr>
<tr>
<td></td>
<td>32. Differential equations</td>
</tr>
<tr>
<td>60</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td></td>
</tr>
</tbody>
</table>
There are many physical situations which cannot be described completely by using just one number. For example, if you know that an aeroplane is travelling at 700 km/h, you may like to know the direction in which it is flying. In this module you will about vectors that are very helpful in describing and analyzing many physical situations around us. Earlier you have studied analytical geometry in two dimensions, now you shall use vector algebra to Three-Dimensional geometry which helps us to solve different physical situations through geometry. In the end of this module you shall study about the direction cosines and direction ratios of a line and also know to find angle between two lines, shortest distance between two lines, the vector and Cartesian equations of a line and a plane, angle between two planes, angle between a line and a plane and distance of a point from a plane.

Linear equations and linear in equations in one and two variables. These equations can be solved algebraically or graphically. On the basis of solutions of linear in
| 38. Mathematical Reasoning | equations you will be able to solve problems on linear programming. The main objective of study of logic is to construct good or sound arguments, and to recognize bad or unsound arguments. Logic is a science of reasoning. In this module you will learn about study of logic in Mathematics, which is prominently called Boolean logic. |
Physics
Code No. 312

Introduction
Physics is a fundamental science because it deals with the basic features of the world, such as, time, space, motion, charge, matter and radiation. Every event that occurs in the natural world has some features that can be viewed in these terms. Study of physics is a means of rationally understanding nature. Physics lies behind all technological advancements, such as computer, internet, launching of rockets and satellites, radio and T.V. communications, lasers, etc. It also finds applications in such simple activities of men as lifting a heavy weight or making a long jump. Physics is, thus, an all pervading science and its study helps us in finding answers to whys and hows of our day to day happenings.

Rationale
Keeping in view the issues highlighted in the National Curriculum Framework (NCF) 2005 for School Education, present Physics curriculum has been so designed that it not only focuses on the basic concepts of Physics but relates them to the daily life activities. The applications of the laws of Physics and their effects on daily life have been reflected in the curriculum. The basic themes of Physics which would be of interest to all, particularly to those who are interested in pursuing Physics as a career in life have been selected to form core content of the curriculum. Besides, the curriculum also includes such emerging areas as electronics, communication, nuclear physics which find immense applications in daily life.

Though mathematics is basic to the understanding of most of the problems of physics, in the present course, stress has been given to avoid rigour of mathematics like integration and differentiation. The focus has been to teach concepts of physics rather than mathematical calculations.

Objectives
After completing this course, the learner will be able to:

- develop understanding of concepts, fundamental laws, principles and processes in the area of physics;
- establish relationship between causes and effects of physical phenomenon;
- explain the contributions of physics towards improving quality of life;
- create interest in physics and foster a spirit of enquiry;
- develop experimental skills like taking observations, manipulation of equipment, and communicative skills such as reporting of observations and experimental results;
- develop problem solving ability e.g. analyzing a situation or data, establishing relationship between cause and effect;
• develop scientific temper of mind by making judgment on verified facts and not opinions, by showing willingness to accept new ideas and discoveries; and
• develop awareness of the dangers inherent in the possible misuse of scientific knowledge.

Scope and job opportunity
This field has a large number of opportunities for employment, some of these are:
• career in engineering and medical
• career in teaching in schools, colleges and universities
• job in research institute and laboratories
• opportunities in aviation industry, defence sector, power generating companies and hospitals.

Eligibility conditions
Age: 15 Years
Qualification: 10th Pass
Medium of instruction: Hindi, English, Urdu, Bengali, Gujarati and Odia.
Duration of the course: 1 Year

Weightage
Theory: 80 Marks
Practical: 20 Marks

Tutor Marked Assignment (TMA): 20% Marks of the theory

Scheme of studies: Theory (240 hours), TMA (self paced)

Scheme of evaluation:

<table>
<thead>
<tr>
<th>Mode of evaluation</th>
<th>Syllabus/Contents</th>
<th>Duration</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutor Marked Assignment (TMA)</td>
<td>All contents marked as TMA</td>
<td>Self paced</td>
<td>20%</td>
</tr>
<tr>
<td>Public/Final examination</td>
<td>All contents marked as PE</td>
<td>3 Hours (Theory)</td>
<td>80%</td>
</tr>
<tr>
<td></td>
<td>Practical</td>
<td>3 Hours (Practical)</td>
<td></td>
</tr>
</tbody>
</table>

Pass criteria: 33% Marks in each component.
## Course content

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Module/Topics</th>
<th>Duration (in hours)</th>
<th>Module Approach (Theory)</th>
<th>Description of practicals</th>
<th>Weightage (marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Module–I Motion, Force and Energy</td>
<td>45</td>
<td>Besides highlighting the importance of universal standard units of measurement, applications of dimensions and vectors in the study of physics have been described in this module. The physics scope, need of measurement, concept of motion and rest, cause of motion and different types of motion has been described with the help of daily life examples. Significance of gravitation, concept of work and energy are highlighted. The basics of the motion of a rigid body and the significance of rotational motion in day to day life have been explained.</td>
<td>To determine the internal diameter and depth of a cylindrical container (like tin can, calorimeter) using a Vernier calipers and find its capacity. Verify the result using a graduated cylinder. To determine the diameter of a given wire using a screw gauge. To determine the radius of curvature of a concave mirror using a spherometer. To find the time period of a simple pendulum for small amplitude and draw the graph of length of the pendulum against square of the time period. Use the graph to find the length of the second’s pendulum. To find the weight of a given body using law of parallelogram of vectors.</td>
<td>14</td>
</tr>
<tr>
<td>Module–II</td>
<td>Module–III</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The classification of the substances into solids, liquids and gases is done on the basis of intermolecular forces. This module explains the elastic behaviour of the solids and highlights source of elastic behaviour of solids. The mechanical properties of the fluids like buoyancy, surface tension, capillary action etc. have been explained with the help of daily life examples and their applications have been highlighted.</td>
<td>Thermal energy theory has been described. Behaviour of gases and the gas laws have been described with the help of kinetic theory of gases. The concept of temperature has been explained by thermal equilibrium. Black</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To measure extensions in the length of a helical spring with increasing load. Find the spring constant of the spring extension graph. To find the time required to empty a burette filled with water, to ½ of its volume, to ¼ of its volume, to 1/8 of its volume and so on. Then plot a graph between volume of water in the burette and time and thus study at each stage that the fractional rate of flow is same (analogy to radioactive decay).</td>
<td>To study the Newton's loaf of cooling by plotting a graph between cooling time and temperature, difference between calorimeter and surroundings. To determine the specific heat of a solid using the method of mixtures.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Body Radiation, laws of thermodynamics and their applications in our day to day life have been explained in this module. Working of heat engines and refrigerators has been explained. Different modes of transfer of heat and their applications in different situations have been emphasized. The concept of thermal pollution and the issue of greenhouse effect are also dealt with in this module.

<table>
<thead>
<tr>
<th>4. Module–IV Oscillations and Waves</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Simple Harmonic Motion</td>
</tr>
<tr>
<td>14. Wave Phenomena</td>
</tr>
</tbody>
</table>

Besides explaining the terms associated with periodic motion, the harmonic motion has been described with the help of common examples. A qualitative idea of forced oscillations, resonance and damped oscillations has also been given in

To compare the frequencies of two tuning forks by finding first and second resonance positions in a resonance tube. To establish graphically the relation between the tension and length of a string of a sonometer vibrating in its fundamental model resonating with a
the module. Use the graph to determine the mass per unit length of the string.
To determine the wavelength of sound produced (i) in air column, (ii) the velocity of sound in air at room temperature using a resonance column and a tuning fork.

<table>
<thead>
<tr>
<th>5.</th>
<th>Module–V Electricity and Magnetism</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.</td>
<td>Electric Charge and Electric Field</td>
</tr>
<tr>
<td>16.</td>
<td>Electric Potential and Capacitors</td>
</tr>
<tr>
<td>17.</td>
<td>Electric Current</td>
</tr>
<tr>
<td>18.</td>
<td>Magnetism and Magnetic Effect of Electric Current</td>
</tr>
<tr>
<td>19.</td>
<td>Electromagnetic Induction and Alternating Current</td>
</tr>
</tbody>
</table>

The basic concepts of electrostatics and frictional electricity have been described in the module. The electric field and electric potential due to a point charge have been explained. Different types of capacitors, their combinations and applications have been explained. The electric current and thermal and magnetic effects of current are explained in the module. Significance of magnetic effect of current and

To verify the law of combination (series and parallel) of resistances using ammeter-voltmeter method and coils of known resistances.
To compare the e.m.f’s of two given primary cells by using a potentiometer.
To determine the specific resistance of the material of two given wires using a metre bridge.
To determine the internal resistance of a primary cell using a potentiometer.
To determine the inductance and resistance of a given coil (inductor) using a suitable series
electromagnetic induction has been emphasized. The generation and transmission of current power and the problems of low voltage and load shedding have been explained.

To study decay of current in a R.C. circuit while charging the capacitor, using a galvanometer and find the time constant of the circuit.

To draw the lines of force due to a bar magnet keep (i) N-pole pointing to north (ii) N-pole pointing to South. Locate the neutral points.

To determine the internal resistance of a moving coil galvanometer by half deflection method, and to convert it into a voltmeter of a given range, say (0-3V), and verify it.

To find the value of v for different values of i in case of a concave mirror and find its focal length (f) by plotting graph between 1/u and 1/v.

To find the focal length (f) of a convex lens by plotting graph between 1/u and 1/v. To find the focal length (f) of a convex mirror using a convex lens.

6. Module–VI
   Optics and Optical Instruments
   20. Reflection and Refraction of Light
   21. Dispersion and Scattering of light
   22. Wave Phenomena and Light
   23. Optical Instruments

   After giving a brief introduction of reflection of light, the basic concepts like refraction, total internal reflection, dispersion, scattering, of light have been described in the module. The wave properties of light like interference, diffraction and polarization are...
| 7. | Module–VII
Atoms and Nuclei |
| 24. | Structure of Atom |
| 25. | Dual Nature of Radiation and Matter |
| 26. | Nuclei and Radioactivity |
| 27. | Nuclear Fission and Fusion |
| 25 | Different atomic models describing the structure of atom have been described and the limitations of these and their modifications have been systematically presented in the module. Nuclei and radio activity have been explained along with their applications. The | Determine the focal length of a concave lens by combining it with a suitable convex lens. To draw a graph between the angle of incidence (i) and angle of deviation (D) for a glass prism and to determine the refractive index of the glass of the prism using this graph. To compare the refractive indices of two transparent liquids using a concave mirror and a single pin. To set up an astronomical telescope and find its magnifying power. | 08 |
peaceful uses of nuclear energy have been described highlighting the latest trends.

<table>
<thead>
<tr>
<th>8.</th>
<th>Module–VIII Semiconductor Devices and Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>28.</td>
<td>Semiconductors and Semiconducting Devices</td>
</tr>
<tr>
<td>29.</td>
<td>Applications of Semiconductor Devices</td>
</tr>
<tr>
<td>30.</td>
<td>Communication Systems</td>
</tr>
</tbody>
</table>

Semiconductors find a very significant place in almost all the electronic devices. Besides highlighting the basis of semiconductors, different types of semiconductor devices and their applications have been explained in the module. In the present age of information and communication technology, it is essential for all to know the basic of electronics and communication technology. Working principles of communication systems, the communication techniques and media used in daily life have been explained.

To draw the characteristic curve of a forward biased pn junction diode and to determine the static and dynamic resistance of the diode.

To draw the characteristics of an npn transistor in common emitter mode. From the characteristics find out (i) the current gain (α) of the transistor and (ii) the voltage gain Av with a load resistance of 1 kΩ.
Introduction
Chemistry is a branch of Physical Sciences that studies the composition, structure, properties and change of matter. Chemistry is sometimes called the Central Science because it bridges other Natural Sciences including Physics, Geology and Biology. Chemistry plays a pivotal role in many areas of science and technology viz. health, medicine, energy and environment, food, agriculture and new materials.

Rationale
According to present scheme of school education at Senior Secondary stage, chemistry emerges as a separate discipline. It is this stage where major emphasis is laid on providing suitable conceptual foundation. The present Senior Secondary level Chemistry (313) course at NIOS has now been revised as per the Common Core Curriculum developed by COBSE (Council of Boards of School Education) and NCERT (National Council for Educational Research and Training) making it current and need based.

The present Chemistry course has been developed basically around the themes: Why do chemical reactions occur? What is the quantitative relationship among reacting constituents in a chemical reaction? How far and how fast will a chemical reaction proceed under a given set of conditions? Can we predict whether a chemical reaction will occur or not? What is the relation between the structure of a chemical substance and its functions/properties? In what way is a chemical reaction relevant for getting new types of substances and materials for daily life and chemical industries?

Objectives
After completing this course, the learner will be able to:

- explain the principles, theories and laws of chemistry responsible for various chemical processes/reactions;
- realise the role of chemistry in production of many elements (metals/non-metals) and compounds useful in industries and daily life;
- identify the chemical nature of inorganic and organic substances around him/her;
- choose various vocational, professional and applied courses of choice based on knowledge of chemistry gained;
- perform chemical calculations to know about the chemical reactions and chemical compounds;
- explain chemical reactions, concepts and phenomenon;
- develop awareness about uses and abuses of chemical substances;
- develop skills of arranging/setting apparatus, handling apparatus and chemicals properly; and
- analyse and synthesise simple compounds.
Scope and job opportunity

This field has a large number of opportunities for employment, some of these are:

Chemical Sciences (Chemistry) offer access to a wide range of careers. The career options in chemistry are practically endless. Some of the important career opportunities after studying Chemistry at Senior Secondary level are petrochemical and pharmaceutical industries, analytical chemist, clinical biochemist, chemical development engineer, toxicologist, laboratory assistant, research associate/research assistant, textile industry, biotechnology, biochemistry, plastic and polymer industry, quality controller, teacher, lecturer, professor, scientist, scientific journalist, forensic scientist and so on.

Eligibility conditions

Age: 15 years

Qualification: 10\textsuperscript{th} pass

Medium of instruction: Hindi, English, Urdu, Bengali, Gujarati and Odia

Duration of the course: 1 Year

Weightage

Theory: 80 Marks

Practical: 20 marks

Tutor Marked assignments (TMA): 20% Marks of theory

Scheme of studies: Theory (240 hours), practical (30 hours), TMA (self-paced)

Scheme of evaluation

<table>
<thead>
<tr>
<th>Mode of evaluation</th>
<th>Syllabus/Contents</th>
<th>Duration</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutor Marked Assignment (TMA)</td>
<td>All contents marked as TMA</td>
<td>Self paced</td>
<td>20%</td>
</tr>
<tr>
<td>Public/Final Examination</td>
<td>All contents marked as PE Practical</td>
<td>3 Hours (Theory)</td>
<td>80%</td>
</tr>
</tbody>
</table>

Pass criteria: 33% in each component

Course content
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Module/Topics</th>
<th>Duration (in hours)</th>
<th>Description of Modules</th>
<th>Description of practicals</th>
<th>Weightage (marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Module- I Some Basic Concepts of Chemistry 1. Atoms, Molecules and Chemical Arithmetics</td>
<td>13</td>
<td>This module deals with the scope of chemistry along with atomic theory of matter, laws of chemical combination, relationship between mass and number of particles. It also deals with stoichiometry. This module also deals with chemical formulas and chemical equations also.</td>
<td>Objectives of the present course in practical work are as follows: 1. To develop and inculcate laboratory skills and techniques. 2. To enable the student to understand the basic chemical concepts. 3. To develop basic competence of analysing and synthesising chemical compounds and mixtures. To meet these objectives three different types of laboratory experiments are provided in the present practical course. 1. Experiment for developing laboratory skills/techniques 2. Concept based experiments 3. Traditional experiments (for analysing and synthesising chemicals) A. Introduction B. General Safety Measures</td>
<td>04</td>
</tr>
</tbody>
</table>
C. List of Experiments

1. Basic Laboratory Techniques
   (i) Acquaintance with chemistry laboratory and basic laboratory techniques (cutting, bending and boring of glass tubes, sealing of apparatus, filtration, distillation, crystallisation, preparation calibration, cleaning of glass apparatus and use of burner etc.)
   (ii) Measurement of volume, length, mass and density.

2. Characterization of Chemical substances
   (i) Determination of melting point of a solid organic compound of low melting point (below 100°C) by glass capillary tube method (Paraffin oil may be used as bath).

3. Volumetric Analysis (Quantitative analysis)
   (a) preparation of solution of oxalic acid and ferrous ammonium sulphate
of known molarity by weighing (non-evaluative). Use of chemical balance to be demonstrated.

(b) A study of acid-base titration (single titration only)

(i) To find out the Molarity of given NaOH solution by titrating against standard solution of oxalic acid. Both the solutions to be provided.

(c) A study of redox titrations (single titration only)

(i) To find out the Molarity and strength of given potassium permanganate solution by titrating against M/50 Mohr’s salt (Ferrous ammonium sulphate) solution. Both the solutions to be provided.

(d) To find out the Molarity and strength of given potassium permanganate solution by titrating against M/10 oxalic acid solution. Both the solutions to be provided.
<table>
<thead>
<tr>
<th>No.</th>
<th>Module- II</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Atomic Structure and Chemical Bonding</td>
<td>This module is designed in such a manner so as to bring out the historical approach to the development of the various models of the atoms starting from experimental evidences leading to Rutherford’s nuclear model, idea of line spectrum of hydrogen atom, idea of Bohr model, wave particle duality and Heisenberg’s uncertainty principles, quantum number etc. This module also gives an idea about periodic table and periodicity in properties. Knowing from structure of atoms combine to form molecules and why do these combinations work.</td>
</tr>
<tr>
<td>Module- III</td>
<td>State of Matter</td>
<td>28</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>4.</td>
<td>Module- IV</td>
<td>23</td>
</tr>
<tr>
<td>Chemical Energies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Chemical</td>
<td></td>
</tr>
</tbody>
</table>
| 5. | Module- V Chemical Dynamics | 36 | This module highlights the dynamic nature of chemical reactions which involves mixing substances together to get final products. It emphasizes equilibrium in solutions to explain acid or base behaviour. Also concept of 1. Experiment related to pH change  
(a) Determination of pH of following substances by using a universal indicator solution or pH papers.  
(i) Salt solution (ii) Acids and bases of different dilutions (iii) Vegetable and fruit juices  
(b) Study of pH change |
<table>
<thead>
<tr>
<th>2. Surface Chemistry</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Preparation of lyophilic and lyophobic sol.</td>
</tr>
<tr>
<td>Lyophilic sol - starch</td>
</tr>
<tr>
<td>Lyophobic sol - aluminium hydroxide, ferric hydroxide.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Electrochemistry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variation of cell potential in Zn/Zn^{2+}</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Chemical Equilibrium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study of the shift in equilibrium of the reaction between ferric ions and thiocyanate ions by increasing/decreasing the concentration of these ions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Chemical Kinetics</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Study of the effect of concentration on the rate of reaction</td>
</tr>
</tbody>
</table>
| 6. | Module- VI  
Chemistry of Elements | 60 | In this module, the periodic table is used as the basis for a study of chemistry of some of the common elements and its compounds. There are a large number of elements are found in nature i.e. the reason, the periodic trends to be followed to classify the elements. This module also deals with the characteristics of s-, p-, d- and f-block elements. You will also learn about the properties of transition elements and coordination compounds. | 6. Preparation of Inorganic Compounds  
(i) Preparation of double salt of ferrous ammonium sulphate or potash alum.  
(ii) Preparation of potassium ferric oxalate.  
7. Qualitative Analysis  
Elementary qualitative analysis of a salt involving detection of one cationic and one anionic species from the following groups. (Salts insoluble in hydrochloric acid excluded).  
**Cations:**  
Pb^{2+}, Cu^{2+}, As^{3+}, Al^{3+}, Fe^{3+}, Mn^{2+}, Ni^{2+}, Zn^{2+}, Co^{2+}, Ca^{2+}, Sr^{2+}, Ba^{2+}, Mg^{2+}, NH_{4}^{+}  
**Anions:**  
CO_{3}^{2-}, S^{2-}, SO_{3}^{2-}, SO_{4}^{2-}, NO_{2}^{-}, NO_{3}^{-}, C^{1-}, Br^{−}, I^{−}, PO_{4}^{3−}, C_{2}O_{4}^{2−}, CH_{3}COO^{−}|
| 7. | **Module- VII**  
Chemistry of Organic Compounds  
23. Nomenclature and General Principles  
24. Hydrocarbons  
25. Compounds of carbon containing Halogens (Haloalkanes and Haloarenes)  
26. Alcohol, Phenols and ethers  
27. Aldehydes, Ketones and Carboxylic Acids  
28. Compounds of Carbon containing Nitrogen  
29. Biomolecules | 60 | This module deals with the nomenclature, preparation and properties of hydrocarbons and their derivatives containing halogens, oxygen and nitrogen with different functional groups. The properties and uses of carbohydrates, proteins, fats and enzymes are also discussed in this module. | 8. | Preparation of Organic Compounds  
Preparation of any one of the following compounds:  
- Acetanilide  
- Iodoform.  
9. Chromatography  
(a) Separation of coloured substances by paper chromatography, and comparison of their Rf values for a mixture of red and blue ink or a black ink.  
OR  
(b) Separation of coloured substances by paper chromatography, and comparison of their Rf values for juice of a flower or grass.  
10. Detection of Elements  
Detection of nitrogen, sulphur, chlorine, bromine and iodine in an organic compound (combinations of halogens to be avoided). Not more than two of the above elements should be present in the given organic compound. | 18 |
<table>
<thead>
<tr>
<th>8.</th>
<th><strong>Module- VIII</strong></th>
<th>20</th>
<th>This module deals with the chemistry in everyday life. This module highlights the role of chemistry in the field of drugs, medicines, soaps, detergents, and polymers. This module also deals with</th>
</tr>
</thead>
<tbody>
<tr>
<td>30.</td>
<td>Drug and Medicines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31.</td>
<td>Soaps, Detergents and Polymers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32.</td>
<td>Environmental Chemistry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Characteristic Tests for carbohydrates; fats and proteins and their detection. Study of simple reactions of carbohydrates; fats and proteins in pure form and detection of their presence in given food stuffs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Tests for the functional groups present in organic compounds. Test of functional groups present in given unknown organic compounds. (i) Test of unsaturation. (ii) Test for Carboxylic, phenolic, aldehydic and ketonic groups.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
environmental issues in the form of various types of pollution, global warming, ozone layer depletion etc. It also gives knowledge about achievement of green chemistry for reducing pollution.
Introduction

Biology is the science of life and the revised course includes both Classical and Modern Biology. The course content begins from Biodiversity classification; Structure and function of the living; their reproduction and development and also Genetics, Molecular Biology, Biotechnology and Immunology which are the modern fields of Biology. An exhaustive treatment of the environment in all its aspects is also contained in the curriculum and so are topics like some common human diseases and health and nutrition which are closely related to human welfare.

Rationale

Biology arose in a twofold manner - firstly, as a practicing art towards exploring and improving a variety of usable plant and animal products as well as towards maintaining good health; secondly, as an academic pursuit out of curiosity to know about humans and other living beings and to understand their position on the planet Earth. In other words, the storehouse of knowledge about living beings started building up only when humans were curious to know about life. The course in Biology helps us to respect and appreciate the great diversity of life at all its levels of organization and to understand the impact of progress in biology on our life style.

Biology is not merely a correlational science but also an experimental discipline, which deals with different tools and techniques. In most of the activities that we perform, biology has a role to play. Therefore, the present course aims at imparting biological knowledge vis-a-vis the ever growing human needs. Besides integrating the content and adequate depth into the subject recent advancements in concepts as well as emerging areas like Biotechnology and Immunology have also been introduced.

Objectives

After completing this course, the learner will be able to:

- acquire knowledge of biological terms, facts, concepts, principles and processes in order to understand the living world as a whole;

- appreciate diversity in the living world as also the interrelationships of various living organisms, ecological balance in nature, and the role of biology in human welfare;

- visualize the hazards of environmental pollution, and to create awareness for sustainable use of natural resources in the service of humankind;

- develop insight into the role and impact of Biology in various allied areas such as medicine, agriculture, forestry, biotechnology, veterinary sciences and pharmacology etc.; and

- develop interest in the living world with an aim to respect life.
Scope and job opportunity

This field has a large number of opportunities for employment, some of these are:

Indian Biologists have been pursuing research in the multifarious branches of Biology and we are proud of them. We hope that one day some of you learners will be well known biologists. Knowledge of Biology opens many avenues which you may select as a career. Once you are initiated into Biology and wish to pursue a course related to biology you have the following options:

- Teacher, Environmentalist, Research Scientist, Marine Scientist,
- Medicine, Paramedical Sciences such as Physiotherapy, Forensic Scientist
- Pharmacy, Food Technology, Nursing, Biotechnology,
- Microbiology, Bio-Chemistry and Bio-physics,
- Professionals in the field of Intellectual Property Rights for biologists looking after sanctuaries, zoos and Botanical gardens.

Eligibility conditions

Age: 15 years

Qualification: 10th pass

Medium of instruction: Hindi, English, Urdu, Bengali, Gujarati and Odia

Duration of the course: 1 Year

Weightage

Theory: 80 Marks

Practical: 20 Marks

Tutor Marked Assignments (TMA): 20% of the theory marks

Scheme of studies: Theory (240 hours), practical (30 hours), TMA (self paced)

Scheme of evaluation:

<table>
<thead>
<tr>
<th>Mode of evaluation</th>
<th>Syllabus/Contents</th>
<th>Duration</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutor Marked Assignment (TMA)</td>
<td>All contents marked as TMA</td>
<td>Self paced</td>
<td>20%</td>
</tr>
<tr>
<td>Public/Final Examination</td>
<td>All contents marked as PE Practical</td>
<td>3 Hours(Theory) 3 Hours (Practical)</td>
<td>80%</td>
</tr>
</tbody>
</table>

Pass criteria: 33% in each component
## Course content

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Module/Topics</th>
<th>Duration (in hours)</th>
<th>Module Approach/ Description</th>
<th>Description of practicals</th>
<th>Weightage (marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Module-I <strong>Diversity and Evolution of Life</strong></td>
<td>50</td>
<td>This module would enable the learner to visualize the origin of life on earth and the vast diversity in the living world, and also to group them together at various classification levels. It also intends to stimulate our learner to understand the concepts and theories of evolution. The module also highlights the cell as the basic unit of life and its organization into various forms of tissues.</td>
<td>There are 15 exercises in the Biology Practical Manual. These 15 activities are distributed under three sections as: <strong>Exercise 1</strong> Some common instruments <strong>Exercise 2 (Slide mounting)</strong> 2.1 Preparation of temporary mount of onion peel to observe and study epidermal cells 2.2 Preparation of temporary stained mount of human cheek cells. 2.3 Temporary stained preparation and study of striated muscle fibres in cockroach. <strong>Exercise 3</strong> Study of the microscopic anatomy (histology) of mammalian tissues and organs <strong>Exercise 4</strong> Study of animal specimens and their classification to identify the characteristic features of sponge, earthworm, butterfly,</td>
<td>12</td>
</tr>
<tr>
<td>2.</td>
<td>The Kingdoms Monera, Protoctista and Fungi</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Kingdoms Plantae and Animalia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Cell - Structure and Function</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Tissues and other Levels of Organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. <strong>Module-II</strong></td>
<td>Forms and Functions of Plants and Animals</td>
<td>70</td>
<td>This module highlights the complex nature of the structure and function of the different organ systems in plants and animals with special emphasis on the life processes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------------------------------</td>
<td>----</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Root System</td>
<td>7. Shoot system</td>
<td></td>
<td>apple snail, starfish, dogfish (<em>Scoliodon</em>) bonyfish (Rohu), toad, house lizard, pigeon and bat.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport and</td>
<td></td>
<td></td>
<td>2.4 Preparation of temporary mount of leaf epidermis to study the structure of stomata.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>water Loss in</td>
<td></td>
<td></td>
<td>2.5 Preparation and study of xylem and phloem from <em>cucurbita</em> stem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plants</td>
<td></td>
<td></td>
<td><strong>Exercise 6</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>plants- Mineral</td>
<td></td>
<td></td>
<td><strong>Exercise 7</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutrition</td>
<td></td>
<td></td>
<td>To study the T.S. of dicot and monocot stems and roots from permanent slide.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Nitrogen</td>
<td></td>
<td></td>
<td><strong>Exercise 8</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metabolism</td>
<td></td>
<td></td>
<td>To study the structure and function of different parts of flowers (<em>China rose</em> and <em>Petunia</em>)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Photosynthesis</td>
<td></td>
<td></td>
<td><strong>Exercise 9</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Respiration in Plants</td>
<td></td>
<td></td>
<td>(a) To study the physical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Nutrition and Digestion</td>
<td></td>
<td></td>
<td>(b) To study the physical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Respiration and Elimination of Nitrogenous Waste</td>
<td></td>
<td></td>
<td>(c) To study the physical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Circulation of Body Fluids</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Locomotion and movement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 17. Coordination and Control | 18. Homeostasis | properties of different soil samples
(b) To study the water holding capacity of different soil samples

**Exercise 10**
Demonstration of osmosis by potato osmometer

**Exercise 11**
Determine the rate of photosynthesis in an aquatic plant (*Hydrilla* or *Elodea*)

**Exercise 12**
To demonstrate the release of CO₂ during germination of seeds.

**Exercise 13**
To study about the action of salivary amylase on starch

| 3. **Module-III**
**Reproduction and Heredity**
19. Reproduction in Plants
20. Growth and Development in Plants
21. Reproduction and Population Control
22. Principles of Genetics
23. Molecular Inheritance and Gene | 60 | This module is designed to highlight the diverse methods of reproduction in living beings from unicellular organisms to complex forms including humans. This module highlights the increase in human population all over the world

**Exercise 14**
Study the structure and germination in gram and bean. | 22 |
| 4. | **Module- IV**  
Environment and Health | 50 | This module emphasizes the basic understanding of rules governing the interrelationships in a biotic community. It brings out the basic principle of conservation by pointing out that conservation of natural resources would brighten the prospect of future of humankind. This module aims to create an idea about healthy living. It also |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise 15</td>
<td>13</td>
<td>To study the special adapting features in some plants and animals</td>
<td></td>
</tr>
</tbody>
</table>
imparts knowledge regarding role of proper and balanced diet to prevent nutritional deficiency diseases. The types, causes and modes of transmission of human diseases are discussed.

| 5. **Module- V**  
Emerging Areas in Biology  
30. Biotechnology  
31. Immuno biology: An Introduction | 10 | This module has been included in the Biology course to familiarize the learners with the importance of the new emerging areas of biology like Biotechnology and Immunology which have an impact on human lifestyles. | 07 |
Introduction

History revolves round the story of Human civilization through the ages. It is not just the history of kings or emperors but its subject matter is very vast ranging from political aspect to social, economic, religious, cultural aspects of human civilization. Ancient influences have helped spawn variant interpretations of the nature of history which have evolved over the centuries and continue to change today. The modern study of history is wide-ranging, and includes the study of specific regions and the study of certain topical or thematical elements of historical investigation. Often history is taught as part of primary and secondary education, and the academic study of history is a major discipline in university studies.

Rationale

History is the scientific study of human society at any given point of time and its evolution through the ages. It occupies an important place in the school curriculum. It is taught as a general subject forming a part of Social Science both at the Middle and the Secondary Stages. At the Middle Stage the entire span of Indian History is covered, while at the Secondary Stage, the landmarks in the development of human society are taught.

At the Senior Secondary Stage, the main thrust of History is to bridge the gap between the presence of change-oriented technologies of today and the continuity of our cultural traditions. This shall ensure that the coming generation will represent the fine synthesis between change and continuity. It is, therefore, deemed essential to take up the entire Indian History from the Ancient to the Modern period for Senior Secondary Stage.

Objectives

After completing this course, the learner will be able to:
- trace the major stages in the evolution of Indian society through the ages;
- identify the historical forces responsible for the evolution of Indian society in the Ancient, Medieval and Modern times;
- develop an appreciation of the diverse cultural and social systems of the people living in different parts of the country;
- analyze the legitimate pride in the achievements of Indian people in different ages and in different parts of the country;
- describe the process of change which evolved as a result of interaction with other cultures;
- recognize that the Indian culture is a result of a synthesis of different cultures;
- sensitise younger generation to prejudices and complexes transmitted from the biased interpretation of History, the social environment and the accident of birth;
• reconstruct the contribution of people in the making of the national heritage;
• identify the contemporary problems of India in historical perspective so as to develop an enlightened citizenship for active participation in the establishment of a just social order; and
• develop the scientific temper and objectivity to the study of India’s past in order to relate it to the present.

Scope and job opportunity

This field has a large number of opportunities for employment, some of these are:

Heritage manager: A heritage manager is responsible for the conservation and management of heritage sites like historic buildings, landscapes, museums, ancient monuments and other properties.

Historic buildings inspector/conservation officer: A historic buildings inspector or conservation officer advises and promotes the conservation of the historic environment, particularly in the areas of long-term care, preservation and enhancement.

Museum education officers: Museum education officers aim to deliver high quality and dynamic programmes of learning and participation. They ensure that the collections in a museum act as a learning resource for all ages. They can work both within galleries and museums and also in a community context.

Museum or gallery curator: A museum or gallery curator manages collections of artifacts or works of art. This includes dealing with the acquisition, care and display of items with the aim of informing and educating the public.

Museum/gallery exhibitions officer: A museum/gallery exhibitions officer is responsible for planning, developing, organising, marketing, administering, producing, buying/sourcing and maintaining individual permanent or travelling exhibitions.

Archaeologist: Archaeologist examines ancient sites and objects to learn about the past. The aim of the role is to record, interpret and preserve archaeological remain for future generations.

School teacher: Teachers support, observe and record the progress of their class. They also plan lessons in line with national objectives, with the aim of ensuring a healthy culture of learning.

Eligibility condition

Age: 15 Years

Qualification: 10th pass

Medium of instruction: Hindi, English, Urdu, Bengali, Gujarati and Odia mediums.

Duration of the course: 1 year

Weightage

Theory: 100 Marks
Tutor Mark Assignment (TMA): 20% Marks of the theory

Scheme of studies: Theory (240 hours), TMA (self paced)

Scheme of evaluation: Theory paper 100 marks (3 hours), internal assessment (TMA) - 20% of theory marks (self paced)

Pass criteria: 33% marks in theory

Course content

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Module/Topics</th>
<th>Duration (in hours)</th>
<th>Module Approach/Description</th>
<th>Weightage (marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Module-I</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Ancient India</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Understanding Indian History</td>
<td>55</td>
<td>This module acquaints the learner with the past evidences, archaeological sources and traditions, which help in understanding past history. It gives an overview of the development of the historical process in India from prehistoric times to around 750 A.D. It traces the social, political, economic, religious and cultural development in ancient period. It highlights the importance of Harappan and Vedic Age in the growth of later trends and developments.</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>2. The Geographical settings of India and Pre-historic cultures of India</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. The Harappan Civilization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. The Vedic Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. From Janpadas to Empire</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Post Maurya Developments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Guptas and their Successors upto AD 750</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. India Between AD 750-1200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td><strong>Module-II</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Medieval India</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9. Establishment and expansion of the Delhi Sultanate</td>
<td>55</td>
<td>This module is designed to highlight the factors and forces responsible for the advent of the Turkish and Mughals in India. It traces the efforts made by the Mughals towards political integration of India and the development of a composite culture due to the assimilation of various</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>10. Establishment of Mughal Rule</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Emergence of the regional states</td>
<td>cultures. It acquaints the students with the new trends in polity, economy, society and culture. It makes an attempt to analyse various opinions about the 18th century leading to an understanding of the period. It also identifies the forces that led to the disintegration of the Mughal rule and emergence of independent states in India</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Administrative system of Institutions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Economy of Medieval India</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Cultural Developments in Medieval India</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Understanding the 18th Century</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Module-III</td>
<td>35</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modern India</td>
<td>This module describes the advent of the British and establishment of British in India. The modules is designed to promote a critical approach towards the British policies which transformed a trading company into a sovereign power and to study the impact of modern western ideas on the Indian society which contributed to the social awakening and religious reform movements. It also highlights the cumulative effect of the British rule in the form of popular resistance movements culminating in the revolt of 1857</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Establishment of British rule in India till 1857</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Economic changes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Social changes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Popular resistance to company rule</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Module-IV</td>
<td>35</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>India National movement and Contemporary India</td>
<td>This module deals with the Indian National Movement and the problems, challenges and developments of contemporary India. It acquaints the students with the different trends of Indian National Movement the non-violent, Satyagraha Movement of Gandhiji. Revolutionary movement and about the national movement organized outside India. It also traces the post independence reforms and trends. It is desired to make the learner aware about India’s relation with other countries of the world.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Nationalism</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. National Movement and Indian Democracy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 5. | **Module-V**  
   20th Century World  
   22. Legacy of 19th century  
   23. World War I and the Russian Revolution  
   24. The Inter War Period and The Second World War  
   25. Cold War and its Effects  
   27. Social Transformation in the Twentieth Century  
   28. Changes in the Twentieth Century | 30 | The module is designed to acquaint the learner with all the major developments of 20th century in order to develop a global perspective for historical development. | 15 |
|---|---|---|---|---|
| 6. | **Module-VI A**  
   Evolution of state in India Prerequisite Knowledge  
   29. Towards the formation of state  
   30. Early States  
   31. Medieval States  
   32. Colonial State | 30 | The optional modules are designed to give the learner, the flexibility and freedom to choose a topic of his/her choice. The learner has to choose one of the two modules. These modules are designed to give a deeper understanding into a specific area of history and culture: and is expected to inculcate a rational outlook and analytical approach. | 15 |
| 6. | **Module-VI B**  
   Culture in India  
   29. Contemporary Cultural Situation  
   30. Cultural Production  
   31. Cultural Communication | 30 | | |
Introduction

Geography is study of the description earth’s surface. It is concerned with various aspects explaining the casual relationships of phenomena on the earth. These phenomena are changing with changing locations on the surface of the earth. The variation over the earth surface is known as spatial differentiation. Not only is that, even the changes seen at the same place over a period of time. It is known as temporal variation. Certain scientific reasons are the driving force for these phenomena. The whole of the earth may be studied with respect to certain component. The distribution of that component may be explained by general principles. These components may be varied like earth, water, air, climate, soil, vegetation, environment or life for global study.

Rationale

Geography is introduced as an independent subject at Senior Secondary level. Prior to this, a component of geography is a part of environmental studies till primary level and part of social sciences at secondary level. Being the entry point for higher and professional education, learners choose geography for various purposes. These purposes may broadly be divided as academic interest (i.e. higher studies, research, teaching etc.) and vocational interest (i.e. Cartographer, Regional Planners, GIS & Remote Sensing Specialist, Demographers, Environmentalist etc.) Therefore, there is a need for providing a broad understanding about the subject. Apart from this, geography is also very useful for day-to-day life. Its contributions lie in the contents, cognitive processes, skills and values that geography promotes and thus helps the learners explore, understand and evaluate the environmental and social dimensions of the world.

Interface between people and their environment being the focal point of geography study, it tries to explore the complex relationship between the two at different levels – macro, meso, and micro. Being a distributional science, it tries to understand the variations and patterns of physical and human phenomena over the earth.

Geography is also known as an integrated science. This is the only discipline which acts as a link between social sciences and physical sciences. The former includes contents from economics, history, political science, sociology, anthropology, commerce etc. whereas the latter includes geology, botany, geo-physics, oceanography, climatology etc.

Objectives

After completing this course, the learner will be able to:

- explain the terms, key concepts and basic principles of geography;
- explore the processes and patterns of the spatial arrangements of the natural as well as human phenomena;
• explain the complex relationship that exists between physical and human environment;
• apply geographical knowledge and methods of enquiry to emerging issues and problems at different levels – local, regional, national and global;
• develop an understanding of diverse physical resource base, economic activities and regional inequalities in India;
• summarize the concept of unity in diversity in India and its demographic structure; and
• recognize the spirit and purpose of geography as a discipline in the modern world.

Scope and job opportunity

This field has a large number of opportunities for employment, some of these are:

Armed services, environment management, water resources, disaster management, meteorology and planning and various social sciences. Apart from that, a geographer can help in day to day life like tourism, commuting, housing and health related activities.

Eligibility conditions

Age: 15 Years

Qualification: 10th pass

Medium of instruction: Hindi, English, Urdu, Bengali, Gujarati and Odia mediums.

Duration of the course: 1 Year

Weightage

Theory: 80 Marks

Practical: 20 Marks

Tutor Marked Assignments (TMA): 20% Marks of theory

Scheme of studies: Theory (248 hours), TMA (self paced)

Scheme of evaluation: Theory paper 80 marks (3 hours), practical 20 marks (3 hours), internal assessment (TMA) - (20% of theory marks)

Pass criteria: 33% marks in each component

Course content
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Module/Topics</th>
<th>Duration (in hours)</th>
<th>Module Approach/ Description</th>
<th>Description of practicals</th>
<th>Weightage (marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Module-I</strong>&lt;br&gt;The study of Geography as a discipline&lt;br&gt;1. Nature of Geography as a discipline</td>
<td>08</td>
<td>This module provides the learners an opportunity to know about Geography as an integrating discipline and as a science of spatial organization.</td>
<td></td>
<td>04</td>
</tr>
<tr>
<td>2.</td>
<td><strong>Module-II</strong>&lt;br&gt;Changing face of the earth&lt;br&gt;2. Earth's interior and its Material&lt;br&gt;3. Dynamic surface of the earth&lt;br&gt;4. Evolution of Land forms due to internal forces&lt;br&gt;5. The work of running water and underground water&lt;br&gt;6. The work of moving ice, wind and sea waves&lt;br&gt;7. Major landforms and their economic significance</td>
<td>22</td>
<td>This module aims at giving an understanding of origin and evolution of the earth. It has also been designed to develop among learners an insight into dynamic surface of the Earth and processes of evolution of different landforms.</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>3.</td>
<td><strong>Module-III</strong>&lt;br&gt;The domain of the water on the earth&lt;br&gt;8. Ocean: sub marine relief and circulation of ocean water</td>
<td>08</td>
<td>The purpose of this module is to acquaint the learner with the Ocean, sub marine relief and circulation of ocean water.</td>
<td></td>
<td>04</td>
</tr>
</tbody>
</table>
| 4. | **Module-IV**  
The domain of air on the earth  
9. Structure and composition of atmosphere  
10. Insolation and temperature  
11. Atmospheric pressure and winds  
12. Humidity and precipitation  
13. Weather and climate | 22 | This module has been designed to bring awareness about the atmosphere, Insolation, temperature, pressure, winds, humidity, precipitation and climate. | 10 |
| 5. | **Module-V**  
The domain of life on the earth  
14. Biosphere  
15. Biomes | 12 | This module provides the learners an opportunity to know about biosphere and biomes. This module has been designed to enable the learners to understand about ecology, eco-system and energy flow, case study of desert, coast, mountain eco-systems and global climatic changes. | 06 |
| 6. | **Module-VI**  
Physical setting of India  
16. India–Physical Features  
17. Climate of India  
18. Natural Disasters | 20 | This module provides an understanding of the Physiography of India. This module has been designed to enable the learners to know about Climate, its factors influencing climate, distribution of temperature, | 08 |
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 7. **Module-VII**  
**Natural resources and their development in India**  
19. Our Resources  
20. Land, Soil and Vegetation Resources in India  
21. Our Water Resources | 20 | This module provides the learners an opportunity to know about Concepts of resources, classification as biotic and abiotic, their distribution, utilization of resources, conservation and management of natural resources. This module has been designed to enable the learners to know about vegetation and soils and water resources in India. | 09 |
| 8. **Module-VIII**  
**Economic activities and infrastructural development in India**  
22. Land Use and Agriculture  
23. Development of Mineral and Energy Resources  
24. Industrial Development  
25. Transport, | 20 | This module aims at giving an understanding of land use and agriculture. This module provides the learners an opportunity to know about Mineral energy resources, transport, communication and international trade. | 09 |
<table>
<thead>
<tr>
<th>Module</th>
<th>Title</th>
<th>Duration</th>
</tr>
</thead>
</table>
| 9.     | Module-IX  
Human resource and their development in India  
26. Population Density, Distribution and Growth in India  
27. Population Composition in India  
28. Human Development  
29. Human Settlement | 16 | 08 |
|        | This module provides the learners an opportunity to know about population, distribution, density, growth, migration, patterns, population composition, age, sex, occupation, distribution of scheduled castes and scheduled tribes. This module aims at giving an understanding of Human Development Index, selected indicators and regional population patterns. | | |
| 10.    | Module-X  
Optional module  
(a) Local Area Planning  
30. Local Area Planning  
31. Recommendations through case studies  
32. Data collection, Processing and Analysis | 30 | 12 |
|        | This module provides the learners an opportunity to know about local area planning, recommendations through different case studies, data collection, Processing and Analysis. | | |
|        | (b) Geography of Tourism in India  
30. Tourism-Concept, Resources and Development | | |
| 31. Development of Infrastructure and Growth of Tourism |
| 32. Prospects and Problems of Tourism |
| management, different types problems of tourism. This module provides the learners an opportunity to know about promoting tourism, role of advertising, souvenirs, information booklets, websites, marketing and management. |

| 11. **Practical Geography** |
| Map and its elements |
| 10* |
| This module aims at giving a brief idea about construction of Linear Scale, Latitude and Longitude, Map Projections, interpretation of Topographical Sheets, study of Weather Maps and representation of data. |

| 30* |
| This module provides the learners an opportunity to know about maps, photographs, diagrams, interpretation, identifying physical & cultural features on a map, photographs, diagram, drawing sketches and sketch maps. |

| 5 |

| 3 |

112
<table>
<thead>
<tr>
<th>Statistical Diagrams</th>
<th>30*</th>
<th>This module provides the learners an opportunity to know about data presentation, interpretation and representation of statistical data through diagrams.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practical Record and Viva voice</td>
<td>30*</td>
<td>This module provides the learners an opportunity to know about data <em>including preparation time for record book</em></td>
</tr>
</tbody>
</table>

*including preparation time for record book*
Introduction

Political Science is the study of man in the process of government himself/herself. Political Science comprises theory of the state, concept of sovereign powers, form and functions of government, making and execution of laws, election, political parties, rights and duties of citizens, functions of forces, administration and study of welfare activities of state and government. In broader terms it provides the study of the role of individual in relation to the entire society ranging from small unit of family to the whole world.

The curriculum of Political Science for Senior Secondary course developed by NIOS seeks to provide an understanding and knowledge of Constitution of India, various organisations, political and non-political setups and their operations at the village, district, state, national and global level.

Rationale

Study of human society is not as simple as is generally believed. Society is a complex network of social relations. The individuals entering these relationships are in perpetual change. Therefore, every society searches for an order and also mechanisms to cope with these changes. Emergence of the state or political order is a party of this complex process. The concerns of political order and the way it carries those functions and the problems that it faces are of universal concern. The concerns of political order have further increased with the new role viz. changing the large socio-economic order so as to improve the living conditions. Political Science deals with this vital domain of the society, keeping in mind the changed scenario.

The subject of Political Science seeks to enable the students to gain critical awareness about the political institutions which govern their lives. These institutions are created to maintain peace, order and co-operation, which would otherwise be threatened by conflicts over socio-ethnic identities or religious beliefs, etc. This course seeks to impart knowledge about political institutions which operate at the village, city, district, national and global levels. Thus, segments of the course deal with nation-state, Panchayati raj, district administration, central and state governments as well as United Nations and World Order. It also deals with problems, issues, concerns and political processes that arise in the working of the system. The Political Science syllabus deals not only with political institutions but also with the political ideas. Those ideas deal with the nature, needs, competence, pertaining to justice, liberty, equality, rights, and obligations etc. of the people. They also deal with the requirements, responsibilities and limits of political authority. Thus, the study of Political Science is concerned with the role and responsibilities of governmental agencies at various levels. Political Science focuses on the study of the state, nation, society, government etc.

In this course the primary focus is to strengthen the intellectual capabilities of the students not only to appreciate the theoretical concerns but their application in the concrete context. For this purpose, Indian Political system and its unfolding experience is incorporated in this syllabus. The subject-matter primarily deals with four important aspects:
i. the theoretical framework;
ii. the Indian constitutional framework with a focus on the institutions and organs of the government;
iii. the processes and practices flowing from the constitution in action; and
iv. our relationship with the world outside.

Objectives
After completing this course, the learner will be able to:

- develop an interest in the theory and principles of Political Science;
- outline the institutions and organs through which the power is structured and exercised;
- gain an insight into various political processes and practices;
- construct the democratic values and philosophy of the Indian Constitution;
- illustrate national and global concerns so as to become responsible citizens and agents of democratic governance; and
- explain attitudes and values necessary for healthy civic and political life.

Scope and job opportunity
After completing a course in Political Science, several opportunities are available in both government and private sectors. Professional in politics, public administration, law, and marketing fields are always needed. One can opt for campaign management, polling and electoral politics. The career prospects in political science have widened in the voluntary organization sectors, such as NGOs. The international voluntary organizations, like UNO, have huge scope for proficient political science students across the world. Besides, they can go for higher studies in this field and after that they can join media houses as political journalists and political researchers/analysts. What's more, they can become members of Parliament or State Legislative Assemblies, or serve various political parties as party president, party member, or activist.

Eligibility conditions
Age: 15 Years
Qualification: 10th pass
Medium of instruction: Hindi, English, Urdu, Bengali, Gujarati and Odia
Duration of the course: 1 Year

Weightage
Theory: 100 Marks
Tutor Marked Assignments (TMA): 20% marks of theory
Scheme of studies: Theory (240 hrs), TMA (self paced)
Scheme of evaluation: Theory paper 100 marks (3hours), internal assessment (TMA) - (20% of theory marks)

Pass criteria: 33% marks in theory

Course content

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Module/Topics</th>
<th>Duration (in hours)</th>
<th>Module Approach/Description</th>
<th>Weightage (marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Module-I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Individual and the State</td>
<td>30</td>
<td>This module aims at acquainting the learners with the concept and their meaning such as politics and political science. It seeks to familiarize the learners with various concepts related to citizen, nation, state and government. This module also emphasizes upon the major political theories so that an understanding could be developed among learners about Liberalism, Marxism and Gandhism.</td>
<td>14</td>
</tr>
<tr>
<td>2.</td>
<td>Module-II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aspects of the Constitution of India</td>
<td>35</td>
<td>This module aims at giving an understanding of the ideals and principles that have been incorporated in the Preamble of the Indian Constitution. It has also been designed to develop among learners an insight into the Fundamental Rights and Duties enshrined in the Constitution. It highlights the importance of Fundamental Duties in a citizens’ life. Learners are expected to understand the directions and instructions given in the Constitution to the governments, whether Union or States, to follow while framing policies and programmes. These constitutional directions are aimed at establishing a welfare State in India. Further, the module explains how various</td>
<td>15</td>
</tr>
<tr>
<td>Module</td>
<td>Title</td>
<td>Pages</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-------</td>
<td>-------</td>
<td>-------------</td>
<td></td>
</tr>
</tbody>
</table>
| 3.     | Module-III  
Structure of Government | 50   | The purpose of this module is to acquaint the learner with the three organs of government at the Union and State levels in India and their functionaries. The module also deals with structure and functions of Panchayati Raj System and Urban Local Government. |
| 4.     | Module-IV  
Democracy at Work | 35   | This module has been designed to bring awareness about the functioning of democracy in India. It seeks to impart information about the electoral system in the country. It also highlights the importance of universal adult franchise and the role of political parties both at the national and the regional level in making the Indian democracy a success. It throws light on the importance and role of Election Commission in conducting free and fair elections in the country. |
| 5.     | Module-V  
Major Contemporary | 35   | This module provides the learners an opportunity to reflect on various features of federalism are incorporated in the centre state relationship. Besides, through this module learners are given an understanding of the emergency provisions to meet any national crisis situation. |
<p>|        |       |       | 17 |
|        |       |       | 12 |
|        |       |       | 15 |</p>
<table>
<thead>
<tr>
<th>Module</th>
<th>Issues</th>
<th>25</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td><strong>Module-VI</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>India and the World</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>26. India’s Foreign Policy</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>27. India’s Relations with USA, Russia</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>28. India and its Neighbours: China, Pakistan and Sri Lanka</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This module has been designed to make the learners aware of India’s</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>foreign policy and its increasing role in World politics. This module</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>explains the objectives and principles of India’s foreign policy. It</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>also explains India’s role in the United Nations and its commitment</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>to world peace through this international forum i.e. United Nation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This module also analyses India’s relations with two major powers viz.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>U.S.A. and Russia and also with three of her neighbours i.e. China,</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pakistan and Sri Lanka.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td><strong>Module-VII A</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>World order and the United Nations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>29. Contemporary World Order</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>30. The United Nation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>31. United Nations Peace Activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>32. United Nations and Economic and Social Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This module has been designed to enable the learners to understand the</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>post cold war contemporary world order. The learners will also be</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>introduced to the role and working of the United Nations and its</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>principal organs. It also explains the peace activities of the United</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nations. This module also highlights significance of major United</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nations agencies as instruments of socio-economic development.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td><strong>Module-VII B</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Administrative System in India</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>29. Public Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This module provides an understanding of the administrative system in</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>India by focusing firstly on the founding or Public Service.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. Administrative Machinery at the Centre, State and District Levels</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. Political Executives and Bureaucracy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. Public Grievances and Redressal Machinery</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Commission’s at the Union and State levels and secondly analysing the administrative machinery at the centre, state and district levels. The module also deals with the role of bureaucracy, its relationship with the political executive and mechanism for redressel of public grievances.

*Note: Learner has to choose one Module from VII A or VII B*
Introduction

Economics helps the people of a nation to decide on the optimal allocation of our limited resources. The demand is always greater than the resources available. Economics gives a guidance to manage the scarcity of available resources. Economics can reduce unemployment. Without Economics, welfare of the citizens is not possible. Economics can make society a better place. The curriculum in Economics at Senior Secondary Level has been designed to help specific needs of NIOS learners. The main areas covered relates to the daily working environment of the learners.

Rationale

Economics has become a very sought after subject in the field of Social Science. The knowledge of Economics is very important in pursuing various activities in everyday life such as production, consumption and investment. In Consumption, every individual wants to utilize the income in the best possible manner so as to get maximum satisfaction from the goods and services purchased.

Similarly, as producer, the individual/firm/industry uses the resources to minimize cost and get maximum output/profit. At the economy level, everybody wants that there should be economic growth and development through higher income and employment. Study of economics is very useful to achieve these goals.

At NIOS, students are introduced to the subject of Economics at Secondary stage. The level at this stage is elementary in nature. However, at the Senior Secondary level, students will be exposed to more areas of economics. They are also expected to know the use of tables and graphs/statistical tools to understand and explain various concepts and theories of economics.

Objectives

After completing this course, the learner will be able to:

- understand the structure, problems, working and recent changes in the Indian economy;
- recall principles, laws and concepts of Economics;
- distinguish between factor incomes and non-factor incomes;
- collect, classify and present economic data;
- construct pie chart, frequency polygon and histogram;
- use statistical tools to analyse, interpret and explain data; and
- explain producer’s and consumer’s behaviour.

Scope and job opportunity

This field has a large number of opportunities for employment, some of these are:
• Economic policy maker in every organization.
• Teaching Economics.
• Research.
• business, government, education etc.

Eligibility conditions

Age: 15 Years

Qualification: 10th pass

Medium of instruction: Hindi, English, Urdu, Bengali, Gujarati and Odia

Duration of the course: 1 Year

Weightage

Theory: 100 Marks

Tutor Marked Assignment (TMA): 20% Marks of theory

Scheme of studies: Theory (300 hours), TMA (self paced)

Scheme of evaluation: Theory paper 100 marks (3 hours), internal assessment (TMA) (20% of theory marks)

<table>
<thead>
<tr>
<th>Mode of evaluation</th>
<th>Syllabus/Contents</th>
<th>Duration</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutor Marked Assignment (TMA)</td>
<td>All contents under Part-1 (Module 1, 2 &amp; 3)</td>
<td>Self paced</td>
<td>20%</td>
</tr>
<tr>
<td>Public Examination</td>
<td>All contents under Part-2 (Module 4 to 11)</td>
<td>3 Hours</td>
<td>80%</td>
</tr>
</tbody>
</table>

Pass criteria: 33% marks in theory

Course content

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Module/Topics</th>
<th>Duration (in hours)</th>
<th>Module Approach/Description</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART - 1</td>
<td></td>
<td></td>
<td>Features of Indian Economy-National and Per capita Income, Status of the Social sector, State of agriculture, Industry and foreign trade.</td>
<td>6</td>
</tr>
<tr>
<td>1.</td>
<td>Module-I</td>
<td>35</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Indian Economic Development</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Overview of Indian</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Module-III</td>
<td>Introduction to Statistics</td>
<td>50</td>
<td>Need and scope of statistics, Meaning, functions and importance of statistics in economics, limitations of statistics. Primary and secondary data, collection of primary data, sources of secondary data; organization of data into arrays and frequency distribution. Tabulation, Bar diagrams and pie diagrams, Graphs – Line graph, histogram, Polygon and Ogive.</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Module-II</td>
<td>Current Challenges before the Indian Economy</td>
<td>35</td>
<td>Meaning of Economic Growth and Economic Development. Difference between Economic Growth and Economic Development; Concept of Sustainable Economic Development; Concept of Human Development, Human Development Index, factors affecting economic growth, Common features of underdeveloped countries. Meaning, Types and measures of unemployment, Causes of unemployment in India, Concept of Poverty line and estimates of Poverty, Causes of Poverty in India, Poverty alleviation and employment generation programmes in India, Inequality in income and Regional Inequality.</td>
<td></td>
</tr>
<tr>
<td>Module-III</td>
<td>Introduction to Statistics</td>
<td>8</td>
<td>Need and scope of statistics, Meaning, functions and importance of statistics in economics, limitations of statistics. Primary and secondary data, collection of primary data, sources of secondary data; organization of data into arrays and frequency distribution. Tabulation, Bar diagrams and pie diagrams, Graphs – Line graph, histogram, Polygon and Ogive.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Module-III</td>
<td>50</td>
<td>Need and scope of statistics, Meaning, functions and importance of statistics in economics, limitations of statistics. Primary and secondary data, collection of primary data, sources of secondary data; organization of data into arrays and frequency distribution. Tabulation, Bar diagrams and pie diagrams, Graphs – Line graph, histogram, Polygon and Ogive.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Module-III</td>
<td>8</td>
<td>Need and scope of statistics, Meaning, functions and importance of statistics in economics, limitations of statistics. Primary and secondary data, collection of primary data, sources of secondary data; organization of data into arrays and frequency distribution. Tabulation, Bar diagrams and pie diagrams, Graphs – Line graph, histogram, Polygon and Ogive.</td>
<td></td>
</tr>
<tr>
<td>PART - 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 4. **Module-IV**  
**Statistical Tools**  
8. Measures of Central Tendencies  
9. Measures of Dispersion  
10. Correlation Analysis  
11. Index Numbers | 35 | Meaning of central tendency, computation of arithmetic mean, combined mean, weighted arithmetic mean, median, quartiles and mode. Meaning of dispersion, Measures and methods of computing dispersion, Range, quartile deviation mean deviation, standard deviation (Absolute and Relative measures), Lorenz curve. Meaning, Scatter diagram, Karl Pearson’s coefficient of correlation, Spearman’s Rank correlation. Meaning, types, Construction of simple and weighted index numbers, Laspeyer’s, Paasche’s and Fischer’s wholesale price index, Consumer price index and index of industrial production, uses of index numbers. |
| 5. **Module-V**  
**Introduction to Economics**  
12. Introduction to the Study of Economics  
13. Central Problems of an Economy | 16 | Meaning of Economics, Meaning of Microeconomics and Macroeconomics, relationship and distinction between the two, positive and normative economics. Meaning of economic problem, why Economic Problem arises, Central Problems, What to produce, How to produce and for Whom to produce; Concept of production possibility frontier, Opportunity Cost and marginal opportunity cost. |
| 6. **Module-VI**  
**Consumer’s Behaviour**  
14. Consumer’s Equilibrium  
15. Demand  
| 7. | **Module-VII**  
**Producer’s Behaviour**  
17. Production Function  
18. Cost of Production  
19. Supply  
20. Price Elasticity of Supply | 40 | law of demand, Individual and market demand, demand schedule and demand curve movement along the demand curve and shift in demand curve.  
Meaning, Factors affecting price elasticity of demand. Methods of Calculating price elasticity of demand  
(a) Percentage method  
(b) Total expenditure method  
(c) Geometric method  
Simple numerical problems based on each method |
| 8. | **Module-VIII**  
**Market and Price Determination**  
21. Forms of Market | 16 | Meaning of market, Different forms of market – Perfect competition, monopoly, monopolistic competition and oligopoly- their meaning and features |
<table>
<thead>
<tr>
<th>No.</th>
<th>Module</th>
<th>Title</th>
<th>Pages</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.</td>
<td>Price determination Under Perfect Competition</td>
<td></td>
<td></td>
<td>Meaning of equilibrium price, Determination of equilibrium price, excess demand and excess supply; Effect of changes in demand and supply on equilibrium price and quantity; Simple applications of demand and supply analysis – ceiling price, floor price. Concept of revenue – Total Revenue, Average Revenue Marginal Revenue. Various concepts of profit; profit; Maximization of a competitive firm Total revenue and total cost approach, Marginal revenue and Marginal cost approach</td>
</tr>
<tr>
<td>23.</td>
<td>Revenue and Profit maximization of a Competitive Firm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Module-X Theory of Income and</td>
<td>16</td>
<td></td>
<td>Consumption function, saving function and investment function,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td>Consumption, Saving and Investment</td>
<td>Employment</td>
<td>Consumption, Saving and Investment</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------</td>
<td>------------</td>
<td>------------------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>propensity to consume and save</td>
<td></td>
<td>Determination of Equilibrium level of Income, Increase in income Through Multiplier Process; Excess demand and Deficiency in demand.</td>
<td></td>
</tr>
</tbody>
</table>

| 11         | Module-XI Money, Banking and Government Budget | 16         | Module-XI Money, Banking and Government Budget |
|           | 28. Money and Banking                    |           | 29. Government and the Budget            |
|           | 29. Government and the Budget            |           | Barter system of exchange; Money-      |
|           |                                          |           | its meaning and functions, Supply of   |
|           |                                          |           | Money - currency held by the public    |
|           |                                          |           | and net demand deposits held by the    |
|           |                                          |           | commercial banks, Measures of         |
|           |                                          |           | Money Supply process of credit         |
|           |                                          |           | creation, Central bank-meaning,        |
|           |                                          |           | functions, Monetary Policy to control  |
|           |                                          |           | money supply.                         |
|           |                                          |           | Meaning, Objectives, components,      |
|           |                                          |           | Revenue Receipts and Capital Receipts, |
|           |                                          |           | Revenue expenditure and Capital        |
|           |                                          |           | expenditure, Measures of              |
|           |                                          |           | deficit (Revenue Deficit, Fiscal      |
|           |                                          |           | Deficit and Primary Deficit - their   |
|           |                                          |           | meaning and implications); Fiscal      |
|           |                                          |           | policy and its role.                  |
Introduction

Business activities affect every citizen at their place of work. Business is an activity involving regular production or purchase of goods and services for sale with the object of earning profit. All learners will encounter the world of business when they start working. In order to prepare them to engage in business activity with confidence and competence, we introduce Business Studies as a course at the Senior Secondary Level. This course gives a clear explanation of the functions of business. The curriculum in Business Studies at Senior Secondary Level has been designed to help specific needs of NIOS learners.

Rationale

Business is a dynamic process that brings man, money, machine and materials together to produce goods and services that not only fulfills our basic needs but also provides us comfort and makes our lives easier. If we look into the past we realize that the procedures and practices followed in business in those days were completely different from modern days. Today, the use of modern technology in every field of business, whether it is production or distribution, has made the business globally competitive. It is more sensitive and mostly affected by the consumption pattern of the people, government’s policies and changes in information and communication technology, better transportation facility, etc. It is more exposed to risk and uncertainties than what it was in past. Therefore, a systematic effort is required to understand, analyze, manage and respond to the changes that affect the functioning of business in the present day society.

Keeping in mind the above, the curriculum in the subject of Business Studies at Senior Secondary level is designed to cater to the needs of the learners of National Institute of Open Schooling (NIOS). It aims at creating an interest and understanding in the area of nature and scope of business, business practices in past and the modern trends, forms and formation of business organization, trade and its auxiliaries, management, finance, marketing, consumer protection and would enable the learners to acquire the necessary knowledge to enter into the area of self-employment as well as wage employment.

Objectives

After completing this course, the learner will be able to:

- understand nature of business;
- distinguish different types of business organizations;
- discuss fundamentals of Management;
- recall the functions and Principles of management;
- explain different types of business finance; and
- distinguish internal and external trade.
Scope and job opportunity

This field has a large number of opportunities for employment, some of these are:

- Careers in the field of marketing
- Careers in the field of teaching.
- Business careers in media, advertising, human resources, education, travel & tourism, hotel industry etc.
- Careers in the field of research.

Eligibility conditions

**Age:** 15 Years

**Qualification:** 10th pass

**Medium of instruction:** Hindi, English, Urdu, Bengali, Gujarati and Odia

**Duration of the course:** 1 Year

Weightage

**Theory:** 100%

**Tutor Marked Assignment (TMA):** 20% Marks of theory

**Scheme of studies:** Theory (250 hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 100 marks (3 hours), internal assessment (TMA) (20% of theory marks)

**Pass criteria:** 33% marks in theory

Course content

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Module/Topics</th>
<th>Duration (in hours)</th>
<th>Module Approach/Description</th>
<th>Weightage (marks)</th>
</tr>
</thead>
</table>
2. Characteristics of Business  
3. Objectives of Business  
4. Significance of Business  
5. Classification of Business Activities | 8 |
| 2. **Module-II**  
| Business Organisations |
| 5. Forms of Business Organisation |
| 6. Company Form of Business Organisation |
| 7. Public Sector Enterprises |
| 4. Modern Modes of Business |
| 20 |

| Meaning and importance of support services  
| Types of support services and their nature.  
| Banking, Insurance, Transport, Warehousing, Communication  
| Meaning and Importance of Business Environment  
| Dimension of Business Environment  
| Economic Environment of Business  
| Social Environment of Business  
| Political and Legal Environment of Business  
| Technological Environment of Business  
| Demographic Environment of Business  
| Recent Developments in Indian Economy  
| Concept and Importance of Social Responsibility  
| Social Responsibility towards various interest groups  
| Business Ethics  
| E-business, E-commerce, E-banking, E-post, Outsourcing of Services  
<p>| | 8 |</p>
<table>
<thead>
<tr>
<th>Module-III</th>
<th>Preparing for Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.</td>
<td>Self-employment</td>
</tr>
<tr>
<td>9.</td>
<td>Getting Ready for Wage Employment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10</th>
<th>Types of Joint Stock Company</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. Merits, Limitations and Suitability of Joint Stock Company</td>
</tr>
<tr>
<td></td>
<td>3. Choosing the right form of business organisation.</td>
</tr>
<tr>
<td></td>
<td>4. Multinational Company - Meaning, Features, Advantages and Limitations</td>
</tr>
</tbody>
</table>

| 4 | 1. Concept of Private and Public Sector |
|   | 2. Forms of Public Sector Enterprises-Departmental Undertaking, Public Corporation, Government Company |
|   | 3. Role and Importance of Public Sector Enterprises |

<p>| 3. | Meaning and importance of self-employment |
|    | Characteristics of self-employment |
|    | Avenues for self employment, manufacturing, trading, providing services |
|    | Meaning and characteristics Small Business |
|    | Importance and scope of Small Business in India |
|    | Government’s policies towards small Business in India |
|    | Institutional Support to small Business in India |
|    | Various sources |
|    | Employment exchange- meaning, procedure of registration, types of job offered |
|    | Placement agencies- meaning, concept, jobs offered |</p>
<table>
<thead>
<tr>
<th>4.</th>
<th>Module-IV</th>
<th>25</th>
</tr>
</thead>
</table>
Nature of management – as a science, as an art, as a process, as a discipline, as a group, as an activity
Levels of Management
Principles of Management
Functions of Management. |

<table>
<thead>
<tr>
<th>5.</th>
<th>Module-V</th>
<th>50</th>
</tr>
</thead>
</table>
| **Functions of Management** | 11. Planning and Organising
12. Staffing
13. Directing
14. Co-ordination and Controlling | Meaning, features and importance of planning
Steps in Planning
Meaning and process of organizing
Organisation Structure
Staffing- meaning and importance
Process of staffing
Recruitment and selection training
Directing- meaning and importance
Elements of directing- communication, supervision, motivation, leadership
Coordination- meaning, and significance
Controlling- meaning and nature
Importance of controlling
Process of control |

Advertising media-print and electronic types of job offered
Getting ready for employment-preparing bio-data, preparing for employment test, preparing for interview.
| 6. | **Module-VI**  
Business Finance  
15. Financing of Business  
16. Sources of Long term Finance  
17. Financial Planning  
18. Indian Financial Market | 50 | - Meaning of Business Finance  
- Importance of Business Finance  
- Types of Business Finance:  
  Short term, Medium term and Long term Finance  
- Methods of Raising Capital:  
  Short term Capital: Trade Credit, Bank Credit (Loans and Advances, Cash Credit, Overdraft, Discounting of bills), Factoring, Advance from Customers, Installment credit.  
- Nature and Importance of Long-term finance  
- Sources: Capital market, Special Financial Institutions, Banks, Non-Banking Financial Companies, Mutual Funds, and Retained profits.  
- Foreign Sources of Finance:  
  External Borrowings, Foreign Investment, NRI-financing.  
- Meaning and objectives of Financial Planning  
- Concept of Capital Structure  
- Concept of Capitalization  
- Determining Fixed and Working capital requirement  
- Dividend and its determinants  
- Meaning of Financial market  
- Capital market and Money market | 20 |
<table>
<thead>
<tr>
<th>Module</th>
<th>Subject</th>
<th>Hours</th>
<th>Topics</th>
</tr>
</thead>
</table>
| 7. | Module-VII Marketing Management | 50 | - Primary market and Secondary market  
- Stock Exchange– Role and Functions,  
- Stock Exchanges in India  
- Role of SEBI  
- Meaning of Marketing  
- Importance of marketing  
- Marketing vs. Selling  
- Objectives of Marketing  
- Functions of Marketing  
- Concept of Marketing-mix  
- Product-meaning, classification  
- Pricing- Factors and approaches  
- Place- channels of distribution-meaning, types and factors affecting the choice of an appropriate channel  
- Promotion – meaning and concept of promotion mix  
- Advertising- meaning, difference between advertising and publicity, objectives, media  
- Salesmanship - Meaning, role, qualities of a good salesman  
- Sales promotion- meaning, objectives and tools used |
| 8. | Module-VIII Trade and Consumer Protection | 25 | - Meaning and characteristics of Internal trade  
- Types of middlemen and their role-Wholesaler; Retailer  
- Large Scale retail stores  
- Recent trends in distribution- Direct marketing, Telemarketing, Internet marketing |
| | | Meaning, importance and types |
| | | Difficulties faced in external trade |
| | | Export trade procedure |
| | | Import trade procedure |
| | | Export promotion measures |
| | | Meaning of consumer |
| | | Consumer protection-meaning and importance |
| | | Rights and responsibilities of Consumers |
| | | Mechanism for Consumer Protection |
Accountancy
Code No. 320

Introduction
Owners of an enterprise record financial information to analyse profits. In order to measure the performance of a company, owners require accounting data. Entrepreneurs require capital to start and run a business. If capital is to be raised from banks, then financial statements are to be given to them. Management of every business is done on the basis of financial information given by accountants. Because of this importance of Accounting in organisations, we have introduced Accounting as a course at Higher Secondary Level. This course gives a clear explanation of the activities done by an accountant. The curriculum in Accountancy has been designed to help specific needs of NIOS learners. The main areas covered relates to the daily working environment of the Accountant learners. The course contains seven modules.

Rationale
The last decade has witnessed tremendous changes in business education. The liberalization and globalization have been the primary cause for such changes. With the fast changing economic scenario, the elementary business education along with Accountancy ‘as a language of business’ is gaining its importance. The curriculum in Accountancy provides a firm foundation in basic accounting concepts and also keeps them informed of changes in its methodology concerning particular aspects of the subject. The thrust of the course follows new trends in accounting practices and developing a basic understanding of the nature and purpose of the accounting information and reporting. Further, information technology has occupied a vital place in business activities. Therefore, a lesson designed on computer and computerized accounting shall expose the learners to the basic knowledge about the utility of computers in the business world. The course in Accountancy will prepare learners to logically analyse, evaluate and respond to changes which affect business operations. It opens the doors for higher education as well as sharpens the skills for those who are going for self-employment.

Objectives
After completing this course, the learner will be able to:

- recall basic accounting terminology;
- record business transactions;
- prepare Journal, Ledger and Trial Balance;
- prepare the financial statements and to do analysis of it;
- construct Depreciation Account using different methods;
- develop skill in preparing Partnership accounts ;
- explain and prepare Company Accounts; and
- understand the need, importance and advantages of computerized accounting .
Scope and job opportunity

This field has a large number of opportunities for employment, some of these are:

- career in the field of Accounts Manager
- career in the field of Chartered Accountant
- career in the field of Management Consultant
- career in the field of Teaching

Eligibility conditions

Age: 15 Years

Qualification: 10th Pass

Medium of instruction: Hindi, English, Urdu, Bengali, Gujarati and Odia

Duration of the course: 1 Year

Weightage

Theory: 100 Marks

Tutor Marked Assignment (TMA): 20% Marks of theory

Scheme of studies: Theory (250 hours), TMA (self paced)

Scheme of evaluation: Theory paper 100 marks (3 hours), internal assessment (TMA) (20% of theory marks)

Pass criteria: 33% marks in theory

Course content

There are three parts in Accountancy. Part A is compulsory for all, while the learner has to choose any one part from B or C respectively, during Public Examination.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Module/Topics</th>
<th>Duration (in hours)</th>
<th>Module Approach/Description</th>
<th>Weightage (marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Module-I Basic Accounting</td>
<td>25</td>
<td>• Accounting: Meaning, Objectives, Types of accounting information, advantages and limitations. Users of Accounting information and their needs.</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>1. Accounting - An Introduction</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PART –A
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Accounting Conventions and Standards</td>
<td>- <strong>Basic Accounting Terms:</strong> Business transaction, Event, Account, Capital, Drawings, Liability: Internal &amp; External, Long term &amp; Short term, Asset (Intangible &amp; Tangible, Fixed, Current, Liquid, Fictitious) Receipts (Capital &amp; Revenue), Expenditure (Capital, Revenue &amp; Deferred Revenue), Expense, Income, Profits, Losses, Purchases, Sales, Stock, Debtors, Bills Receivables, Creditors, Bills Payables, Goods, Cost,</td>
</tr>
<tr>
<td>4. Accounting for Business Transactions</td>
<td>- Vouchers, Discount (Trade, Cash, Received &amp; Allowed).</td>
</tr>
<tr>
<td>5. Journal</td>
<td>1. <strong>Fundamental Accounting Assumptions:</strong> Going concern, Consistency, Accrual.</td>
</tr>
<tr>
<td>8. Special Purpose Books</td>
<td>2. <strong>Accounting Standards:</strong> Concept &amp; objective</td>
</tr>
<tr>
<td></td>
<td>1. <strong>Accounting Equation:</strong> Meaning, Analysis of transactions using Accounting Equation.</td>
</tr>
<tr>
<td></td>
<td>2. <strong>Rules of Debit and Credit:</strong> For Assets, Liabilities, Capital, Revenue and Expenses.</td>
</tr>
<tr>
<td>1.</td>
<td>Origin of transaction-Source Documents (Invoice, Cash memo, Pay in slip, Cheque), Preparation of Vouchers-cash (Debit &amp; Credit), Non Cash (Transfer).</td>
</tr>
<tr>
<td>2.</td>
<td>Journalising the simple and compound transactions, classification of journal into special journal &amp; journal proper.</td>
</tr>
<tr>
<td>4.</td>
<td>• Meaning, Utility, Format, Posting from Journal in to ledger.</td>
</tr>
</tbody>
</table>

### Module-II

| 9. | Trial Balance |
| 10. | Bank Reconciliation Statement |
| 11. | Bills of Exchange |
| 12. | Errors and Their Rectification |
| 13. | Computers and Computerised Accounting System |

- **Meaning, Objectives and Preparation of Trial Balance**
- **Meaning, Objectives, Causes of differences between Cash Book and Balances as per Pass Book/Bank Statement and Methods of Preparing Bank Reconciliation Statement.**

Bills of Exchange and Promissory Note: Definition, Feature, Parties, Specimen and Distinction.  
**Important Terms:** Term of Bill, Due date, Days of Grace, Date of Maturity, Bill at Sight, Bill after Date, Discounting of Bill, Endorsement of Bill, Bill Sent for
Collection, Dishonour of Bill, Noting of Bill, Insolvency of Acceptor, Retirement and Renewal of a bill, Accounting Treatment of bill transactions.

- Errors and their types: Errors not affecting trial balance and Errors affecting trial balance.
- Rectification of errors before and after the preparation of financial statements.
- Suspense account: Meaning, preparation and treatment of suspense account balance in final statements.


2. Application of computers in Accounting – Automation of accounting process, designing accounting reports, data exchange with other information systems.


| 3. | **Module-III**  
**Financial Statements**  
14. Depreciation  
15. Provision and Reserves  
16. Financial Statement - An Introduction  
17. Financial Statements – I  
18. Financial Statements – II  
19. Not for Profit Organisations - An Introduction  
20. Financial Statements (Not for Profit Organisation)  
Accounting Treatment of Depreciation: By charging to asset account, by creating Provision for depreciation/accumulated depreciation account, Preparation of Asset Disposal Account.  
1. Meaning, Objective and Difference between Provisions and Reserves.  
2. Types of Reserves: Revenue Reserve, Capital Reserve, General Reserve, Specific reserves, Secret reserves.  
1. Financial Statements: Meaning, Objective and Importance.  
2. Trading and Profit and Loss account: Gross Profit, Operating Profit and Net Profit  
1. Preparing Trading Account and Profit & Loss Account  
Adjustments in Preparation of Financial Statements: With respect to closing stock, outstanding expenses, prepaid expenses, accrued income, income received in advance, depreciation, Bad debts, provision for doubtful debts, | 20 |
| 4. | **Module-IV**  
Partnership Accounts | 50 | 1. **Meaning:** Partnership, Partners, Firm, Partnership Deed.  
3. Fixed v/s Fluctuating Capital Accounts, Division of Profit among partners, Guarantee of profits, past adjustments (Relating to interest on capital, interest on drawing, salary and Profit sharing Ratio), and Preparation of P & L Appropriation Account.  
1. Change in the Profit Sharing Ratio among the existing partners – sacrificing ratio, Gaining Ratio, Accounting for Revaluation of Assets and Re-assessment of Liabilities and Distribution of Reserves and Accumulated profits.  
   - Effect of Retirement/Death of a partner – change in Profit |
| 5. | **Module-V**  
**Company Accounts**  
26. Company - An Introduction  
27. Issue of Shares  
28. Forfeiture of Shares  
29. Reissue of Forfeited Shares  
30. Issue of Debentures | 50 | Meaning of company form of business organization, characteristics of company, types of companies, difference between public & private company, various types of shares issued by company with the type of share capital.  
1. Meaning, Nature and Types  
2. Accounting for Share Capital:  
Issue and Allotment of Equity shares, Private placement of Shares. Public Subscription of shares-over subscription and under subscription of shares. Issue at Par and Premium, calls in advance and arrears, Issue of shares for consideration other than cash.  
Meaning of forfeiture shares, Various situations in which share can be forfeited. | 20 |
<table>
<thead>
<tr>
<th>PART – B</th>
</tr>
</thead>
</table>
| **6. Module-VI**  
**Analysis of Financial Statements**  
31. Financial Statements Analysis - An Introduction  
32. Accounting Ratios – I  
33. Accounting Ratios - II  
1. Accounting Ratios: Objectives and Classification of Ratios.  
2. Liquidity ratios: Current and Quick Ratio.  
1. Solvency Ratios: Debt to Equity Ratio, Total Asset to Debt Ratio, | 20 |
1. Defining Database Requirements, Identification of data to be stored in Tables, Structuring of Data.
2. Creating data tables for accounting, Using queries, forms and reports for generating accounting information with the help of Microsoft Access Software. | 20 |
Introduction

Home Science is concerned with the home, health and happiness of all members of the family and community. It is the art of managing resources efficiently combined with the science of achieving a healthier and happier home. This subject supports the personal enrichment and professional development. It integrates the application of various sciences and humanities to improve human environment, family nutrition, management of resources and child development.

Home Science is a subject for all now, because everyone has a dream of having a perfect home life. The days are gone that household activities were the responsibility of women folk. Now both men and women share the responsibilities in all affairs of the home. It empowers the learner to achieve all round development in different pursuits of life. It opens up endless avenues for the learners to settle as a self employed persons or posses any desirable jobs in established organizations including the NGOs.

Rationale

At no time in history the demands of humans begins have been as diverse as they are today. The individuals are constantly faced with problems of change. They have to make continuous adjustment to their life style that tests their decision making skills.

Home Science teaches an individual to develop knowledge and skills in order to interact better with their environment that includes the family, food clothing and home. The basic aim of studying Home Science is to efficiently use the goods and services available for improving the quality of human life.

Home Science as a subject is of great social significance as it affects an individual’s way of living, eating, raising young ones, etc., which in turn affects the welfare and stability of the family and the society at large. Besides grooming individuals for better living, the study of Home Science also opens up vistas of future vocational pursuits.

Objectives

After completing this course, the learner will be able to:

- develop skills that help in bringing a positive change in daily life style and solving problems;
- develop creative thinking and a rational approach towards everyday life;
- develop scientific temper and a spirit of inquiry; and
- sensitivity to values of ethical living.

Scope and job opportunity

The scope of Home Science extends far beyond the ‘home’ and is not limited to cooking, laundry,
needlework and home decoration. In fact it is the only subject which prepares young learners for the two most important goals in their lives – looking after their home and family and preparing for a career or vocational life. The areas covered in Home Science are vast and varied. There are jobs available if the learner wish to work out side home and as wage employment or the learner can start his or her own enterprise e.g. boutique, production unit, laundry service etc. There are various opportunities available for Home Science students and some of the broader options are mentioned below:

- Catering
- Food preservation/bakery / confectionery
- Interior decoration
- Arts and crafts
- Housekeeping and laundry services
- Dress designing, garment construction: textile science
- Teaching
- Communication and extension
- Resource managers and consumer education

**Eligibility conditions**

**Age:** 15 Years

**Qualification:** 10th pass

**Medium of instruction:** Hindi, English, Urdu, Bengali, Gujarati and Odia

**Duration of the course:** 1 Year

**Weightage**

**Theory:** 80 Marks

**Practical:** 20 Marks

**Tutor Marked Assignment (TMA):** 20% Marks of theory

**Scheme of studies:** Theory (240hours), practical (30hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 80 marks (3 hours), practical 20 marks (3hours), internal assessment (TMA) (20% of theory marks).

**Pass criteria:** 33% in each component.
## Course content

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Module/ Topics</th>
<th>Duration (in hours)</th>
<th>Module Approach/ Description</th>
<th>Description of practicals</th>
<th>Weightage (marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Core Moduels</td>
<td></td>
<td>Home is a place, which provides comfort and meets an individual’s need for safety, security, identity and a sense of belongingness. This module provides an understanding of designing and arranging the environment at home in such a manner that it promotes healthy physical and social development of individuals. It also creates awareness about the various vocational areas in the subject of Home Science.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>The Art and Science of Managing Home Approach</td>
<td>20</td>
<td>L 1 Home Science concept • scope • employment opportunities L2 Family, Health and Security • definitions • types of family • importance of health • factors contributing to health • methods of providing safety and security at home L3 Ethics in Daily Living • definition and need • problems faces • code of ethics • raising ethical standards</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>Food and Nutrition</td>
<td>45</td>
<td>Good health is dependent on the food that we eat. Our diet consists of a variety of food that can be prepared by applying simple knowledge of food and nutrition. This module covers important topics like food, nutrition,</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>
meal planning and preparation. This knowledge helps to alter food habits that can contribute to ensuring good health.

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| **4.** | **L4 Food, Nutrition and Health** | 1. To preserve seasonal foods  
2. To prepare and evaluate dishes using the following methods of food enrichment such as: Combination Fermentation Germination  
3. To collect different food items that is available at home and categorizes them under various food groups. |
|   | **L5 Meal Planning** |   |
|   | • definition and functions of food  
• sources and requirements of nutrients, deficiency of nutrients  
• relationship between food, nutrition and health |   |
|   | **L6 Nutritional Status** |   |
|   | • definition  
• assessing nutritional status  
• causes and prevention of malnutrition  
• recognizing deficiency disorders: Vitamin A, Iron and Iodine  
• causes and prevention of the above deficiency disorder |   |
|   | **L7 Purchase and Storage** |   |
of Food
- selection of food
- food spoilage
- safe handling of food
- methods of storage

L8 Preparation of food
- importance of pre-preparation and preparation of food
- methods of cooking
- conservation and enhancement of nutrients
- hygienic food handling in the kitchen

L9 Food Preservation
- importance
- principles
- household methods of preservation

5. Resource Management 45

In these days of stress, home is a person’s last refuge from the chaos of outside world. One can feel well adjusted if one possesses the knowledge of optimal use of all the resources in one’s environment to achieve satisfaction. ‘Doing things right’ within the available resources is the aim of this module. This module aims at teaching a creative and systematic approach to an improved life.

6. L10 Family Resources Management
- definition, steps and motivating factors
- decision making
- Definition, sources and characteristics
- types of resources,

4. To identify sources of pollution in one’s area and to suggest remedial measures.
5. To take one’s own family as an example and
- optimal use of resources

L11 Time and Energy Management
- significance of making a time plan
- energy management and fatigue
- principles of work simplification
- methods of saving time and energy

L12 Space Management
- meaning and need
- significance of work areas
- space organization for various activities

L13 Income Management
- meaning of income, expenditure and investment
- expenditure plan
- income and expenditure record
- investing money wisely
- generating additional income

L14 Energy Conservation
- meaning and need
- environmental degradation
- role of individuals and government in creating an eco-friendly environment

L15 Environment

6. List the household and related task performed by each member
7. Analyse the work patterns according to age and gender differences in responsibility
8. Comment on this division of tasks
   (i) To record the expenditure for one's own family for a month
   (ii) To evaluate the family's pattern on expenditure and on the basis of the evaluation prepare a budget for the family.
## Management
- Meaning and need
- Environment
- Effect of environment
- Role of individual and government in creating an eco-friendly environment

### L16 Household Equipment
- selection and use
- care and maintenance

### L17 Consumer Education
- definition
- problems faced by consumers
- consumer protection laws and redressal
- role of standardization marks, labeling and packaging
- consumer rights and responsibilities

### 7. Human Development
45
Since every one is a product of environment, their well-being is affected by both external and internal factors. External factors constitute people around you and the housing, food, clothing equipment etc. internal factors are physical, mental, emotional and psychological health. This module explains the role of a family that acts as a life support system and helps to adapt to the changes occurring within and around an individual.

### 8. L18 Growth and Development (0-5 years)
- definition and principles of development
- development during

9. To observe children in the age group of 1yr 6 months – 3yrs for their language
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

infancy and childhood development  
physical, motor, socio-emotional, cognitive and language development  
behaviour problems in children  

L19 Growth and Development (6-11 years)  
characteristics of physical, motor, socio-emotional, cognitive and language development  

L20 Adolescence  
definition and physical development  
sexual maturation and sex education  
characteristics of physical, motor, socio-emotional, cognitive and language development  
problems faced by adolescents  

L21 Concerns and Issues in Human Development  
position of the girls child in society  
juvenile delinquency  
child lab or  
socio-economically disadvantaged children  
major physical disabilities  
mental retardation  
safe motherhood  
HIV/AIDS  

achievements  
10. To observe a child in the age group of 1-2 yrs and record how he/she expresses anger and fear.  
11. To visit a nearby nursery school and observe and three children for their social behaviour  
12. To obtain a teenager’s view about the physical changes and social and emotional problems faced during adolescence.
9. **Textiles and Clothing**

<table>
<thead>
<tr>
<th>L21 Introduction to Fabric Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>meaning and scope of fabric science</td>
</tr>
<tr>
<td>fibre-definition, classification and properties</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L22 Yarn and its Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>definition and yarn processing</td>
</tr>
<tr>
<td>properties and types of yarns</td>
</tr>
<tr>
<td>textured yarns</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L 23 Fabric Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>techniques of fabric construction</td>
</tr>
<tr>
<td>weaving</td>
</tr>
<tr>
<td>knitting</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L 24 Textile Finishes</th>
</tr>
</thead>
<tbody>
<tr>
<td>meaning and importance</td>
</tr>
<tr>
<td>types of finishes and their properties</td>
</tr>
<tr>
<td>dyeing and printing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L 25 Selection of Textiles and Clothing</th>
</tr>
</thead>
<tbody>
<tr>
<td>selection of textiles for different and use</td>
</tr>
<tr>
<td>selection of clothing</td>
</tr>
<tr>
<td>quality assurance –</td>
</tr>
</tbody>
</table>

13. To weave plain and it will weave using strips of paper

14. To collect six samples each of fabrics made by these two weaves

15. To remove curry, blood, mud, ink and tea/coffee stains from white cotton fabrics

16. To launder the following materials;

Cotton – ‘A’ line frock/pillow case/petticoat/pyjama
Silk – blouse/scarf
Wool – cardigan/cap/scarf
Synthetic – shirt/saree/pant
### L 26 Care and Maintenance of Textile
- Steps in laundering
- Characteristics of auxiliaries – soap, detergents, blue and starch
- Identification and removal of stains
- Dry cleaning
- Storage of clothes

### 11. Optional Modules
- **Housekeeping-6 A**
  Every individual enjoys living in a clean environment, which includes homes, place and community. The knowledge of housekeeping enables the individuals to promote and maintain cleanliness, and derive psychological satisfaction by promoting aesthetics at home and workplace. The module is aimed at imparting knowledge in housekeeping for everyday activities and also facilitates in taking up housekeeping related jobs.

### L 26 Introduction to Housekeeping
- meaning
- importance
- areas of housekeeping
- functions of a housekeeper
- personal grooming of the housekeeper

### L 27 Cleaning and Cleaning Materials
- cleaning materials and equipment
- methods of cleaning
- types of cleaning

### L 28 Maintenance of Premises
- To care for, maintain and clean wooden, floor, brass, aluminum, silver and plastic
- To use waste material for preparing useful household items
- To practice cleaning the following (to be done under adult supervision only)
  - An electric Fuse
  - 3 pin plug of an
| 14. **Creative Hand Embroidery-6 B** | **L30 Introduction to Creative Hand Embroidery**  
- historical perspective  
- meaning  
- materials and tools  

**L31 Design**  
- types of design (geometric, stylized, abstract)  
- enlargement/reduction of design  
- transfer of design  
- placement of design  

**L32 Colour**  
- Prang’s colour wheel  
- properties of colour  
- colour schemes  

**L33 Embroidery Stitches**  
- common hand embroidery stitches  
- running stitch, stem, stitch, chain, stitch, cross stitch, herringbone stitch, blanket stitch, French knot, long and short stitch. | Hand embroidery is an ancient art of our country and in the present time embroidered clothes have become a fashion both among girls and boys. Embroidery enriches and clothes that you wear. This vocational module is aimed at providing knowledge and skill to venture into the area of creative hand embroidery for beautifying one’s own clothing or to take up embroidery as a vocation. |
| To make a colour wheel  
To prepare samples of various embroidery stitches  
To do enlargement and reduction of motifs created. |
Introduction
Psychology is the scientific study of the mind and behavior. Psychology is a multifaceted discipline and includes many sub-fields of study such as human development, sports, health, clinical, social behavior and cognitive processes.
Psychology is really a very new science, with most advances happening over the past 150 years or so. However, its origins can be traced back to ancient Greece, 400 – 500 years BC. The emphasis was a philosophical one, with great thinkers such as Socrates influencing Plato, who in turn influenced Aristotle.

Rationale
Psychology is a discipline which is relevant to all walks of life. Its applications to the various areas of personal, organizational and social functioning are well recognized. All of us use various psychological concepts without knowing them. This course at the Senior Secondary level has been designed in such a way that the learners will know the basics of psychology in simple language. Attention has also been paid to the Indian context.

The course at the Senior Secondary level is also introducing project work for the first time. Understanding psychological concepts and their application requires study of textual material as well as practical work. Project work will help the learners to apply the key concepts of psychology as well as help them to get hands – on – experience of the various methods used by psychologists. It also contributes to the development of scientific approach different from common sense or speculation. Attention has also been paid to give the practical applications of various psychological concepts with the help of case studies, examples and real life experiences.

Objectives
After completing this course, the learner will be able to:
- explain the basic concepts used in psychology;
- enumerate skills for personal growth and development;
- select basic research methods in psychology;
- apply the principles of psychology in field work;
- recall and relate psychology to personal and social life; and
- lead a purposeful life by using the principles of psychology in personal, professional and social life.

Scope and job opportunity
This field has a large number of opportunities for employment, some of these are:
Clinical psychologists: Clinical psychologists aim to reduce the distress and improve the psychological wellbeing of their clients. They use psychological methods and research to make positive changes to their clients' lives and offer various forms of treatment.

Counsellor: As a counselling psychologist one uses psychological theory and research in therapeutic work to help clients with a variety of problems. These problems can include difficult life issues and mental health conditions.

Educational psychologists: Educational psychologists help children or young people who are experiencing problems that hinder their successful learning and participation in school and other activities. These problems can include a range of emotional and social problems or learning difficulties.

Health psychologists: Health psychology examines how biological, social and psychological factors influence health and illness. Health psychologists use psychological science to promote health, prevent illness and improve health care system.

Occupational psychologists: Occupational psychologists apply expert knowledge to all levels of working and may work on organisational issues, such as culture and change, as well as issues at an individual or team level.

Primary care graduate mental health workers: Primary care graduate mental health workers provide a range of treatments, support and advice to people suffering from common mental health issues, such as anxiety and panic attacks.

Sport and exercise psychologists: Sport and exercise psychologists are concerned with the behaviours, mental processes and well-being of individuals, teams and organizations involved in sport and exercise. They typically specialize in either sport or exercise, although some work across both fields.

Eligibility conditions

Age: 15 Years

Qualification: 10\textsuperscript{th} pass

Medium of instruction: Hindi, English, Urdu, Bengali, Gujarati and Odia.

Duration of the course: 1 Year

Weightage

Theory: 100 Marks

Tutor Marked Assignment (TMA): 20% Marks of theory

Scheme of studies: Theory (240 hours), Tutor Marked Assignment TMA (self paced)

Scheme of evaluation: Theory paper 100 marks (3 hours), internal assessment (TMA) (20% of theory marks).
Pass criteria: 33% marks

Course content

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Module/Topics</th>
<th>Duration (in hours)</th>
<th>Module Approach/Description</th>
<th>Weightage (marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Module-I</td>
<td>40</td>
<td>This module would help the learners to understand the basic processes and applications of psychology, methods used in studying psychology, the psychological functioning of the human and its effects.</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Foundations of Psychology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Psychology: Understanding Self and Others</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. How Psychologists Study?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Biological and Cultural Shaping of Mind and Behaviour</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Becoming Aware of the World Around Us</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Attention and Perception</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Module-II</td>
<td>40</td>
<td>This module is primarily concerned with those psychological processes which constitute the dynamics of human functioning. Thus they are not only theoretically important but have practical relevance. In particular, this module deals with learning, memory, thinking, motivation and emotion. In this way it covers the entire range of psychological process involved in interacting with environment and developing competence in areas central to success in life.</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Key Psychological Processes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Learning Process and Acquiring Skills</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Remembering and Forgetting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. Going Beyond the Reality: Thinking and Reasoning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9. Motivation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10. Emotions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Module-III</td>
<td>40</td>
<td>This module aims at describing the various stages of human development and their characteristics. It also focuses on</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Developmental Processes</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Module- IV
Self and Personality
16. What is Self?
17. Self and Psychological Processes
18. Personality Theories
19. Personality Assessment
20. Psychological Disorder

40

Module- V
Social and Applied Psychology

40

Social psychology is an important branch of psychology. It deals with the social functioning and processes.

This module has been redesigned to accommodate the evolving needs of the field.
<table>
<thead>
<tr>
<th>Module</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. Group Processes</td>
<td>facilitate the learners in understanding various social factors and processes. It intends to help the learners in adopting interventions for leading a healthy lifestyle.</td>
<td></td>
</tr>
<tr>
<td>22. Person Perception and Interpersonal Attraction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Man Environment Interaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Psychotherapy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. Health Psychology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Module- VI A*</td>
<td>This module familiarizes the learners with the application of Psychology in the work situation. It would help the learners in understanding the psychological processes involved in career choice, vocational adjustment and managing stress and promoting well-being.</td>
<td>15</td>
</tr>
<tr>
<td>World of Work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. Education and work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Career Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Vocational Choice and Vocational Adjustment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. Stress and Your Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. Stress management and Well-Being</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Module- VI B*</td>
<td>This module would develop an understanding of the importance of early childhood education. It will also help the learners to understand the usefulness of play centers and the role of parents and community in the play centers.</td>
<td>40</td>
</tr>
<tr>
<td>Facilitating Early Childhood Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. Developmental Patterns in Early Childhood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. Play Centre: Objectives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. Play Centre: Structural Details</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. Planning and Conducting Programmes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. Involvement of Parents and Community in a Play Centre</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Learner has to choose one Module from VI A or VI B*
Computer Science
Code No. 330

Introduction
Computer has become indispensable in today’s life. Computer Science is an exciting, challenging field that has impact in most aspects of today’s life. Most important aspect of computer science is problem solving skills and analytical skills which learner will develop by studying computer science subject. These skills are mandatory for anyone who is searching a job. Moreover, Computing jobs are the highest paid jobs. Keeping in view of the above Computer Science course has been designed.

The syllabus of Computer Science for Senior Secondary course developed by NIOS to provide knowledge and understanding of basic components of computer and their working, uses of Internet, C++ programming and problem solving skills.

Rationale
In recent years there has been a spur in the use of computers in India, from simple word processing to sophisticated scientific applications. Along with this there is a tremendous demand for computer education. In order to cater to this need and to provide quality education at reasonable price this course has been designed.

Objectives
After completing this course, the learner will be able to:

- identify the basic components of computer and their working;
- use of operating system;
- list the types of computer network;
- use of various services provided by internet;
- practice basics of Java programming language;
- use of C++ programming;
- state basic concepts of OOP;
- use of control statements in C++ programming;
- define library and user defined functions in C++ programming;
- use of one dimensional and two dimensional array;
- select members of the class;
- explain the concept of inheritance;
- use pointers in arrays; and
- use of files in C++ programming.
**Scope and job opportunity**

Information technology professionals plan, coordinate and implement computer and information systems within an organization. Typically, they work with other managers within the company to determine the computer-related needs of an organization in relation to computer systems, software, servers, computer networking or network security. Information technology (IT) professionals go on to a variety of careers as IT managers, IT project managers, IT directors and, at the highest levels of business, chief technology officers or chief information officers. Job opportunities for computer information systems managers are keep on increasing. IT professionals, particularly those with specialized technical skills and business management backgrounds, will have the best opportunities for advancement in the field.

Nowadays every organisation is computerised. Government is also promoting digital literacy. So each person should have the basic knowledge of the computer whether he/ she is working in office / banking or teaching in a school or doing e-commerce business or designing a website or developing mobile app. Comptuer Science course will help the learners to face the present and future world.

**Eligibility conditions**

**Age:** 15 Years

**Qualification:** 10th pass

**Medium of instruction:** English

**Duration of the course:** 1 Year

**Weightage**

**Theory:** 60 Marks

**Practical:** 40 Marks

**Tutor Marked Assignment (TMA):** 20% Marks of theory

**Scheme of studies:** Theory (144 hours), practical (96 hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 60 marks (3 hours), practical 40 marks (3 hours), internal assessment (TMA) (20% of theory marks)

**Pass criteria:** 33% in each component

**Course content**
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Modules</th>
<th>Duration (in hours)</th>
<th>Module Approach/Description</th>
<th>Description of practicals</th>
<th>Weightage (marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Module-I</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Computer Fundamentals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Anatomy of a Digital Computer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Data Processing Concept</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Computer Software</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Operating System</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Data Communication and Networking</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Fundamentals of Internet and Java</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Programming</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>54</td>
<td>This module explains about digital computer, data processing concept, computer software, data communication &amp; networking and fundamentals of Internet and Java.</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>2.</td>
<td><strong>Module-II</strong> C++</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Introduction to C++</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. General Concept of OOP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9. Control Statements</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10. Functions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11. Array</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12. Structure, Typedef &amp; enumerated</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>186</td>
<td>This module explains about C++ programming concepts.</td>
<td>1. Write a program to input the values of Principle, Rate, and Time and calculate Simple Interest.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>186</td>
<td></td>
<td>2. Write a program to input the unit price of an item and the quantity of item to be bought. Then calculate the total price.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3. Write a program to covert temperature from Fahrenheit to</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Classes &amp; objects with constructors / destructors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Inheritance extending classes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Pointer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Files</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Write a program to input two numbers and swap them using third variable or swap them without using third variable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Write a program to input a character and check whether it is an alphabet, or digit, or some other character.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Write a program to input an year (e.g., 1994) and check whether it is a leap year.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Write a program to input a character. If the character is a lowercase alphabet then display the corresponding uppercase alphabet and vice-versa. If the character is not an alphabet then display the character as it is.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Write a program to input 10 numbers and find their sum and average.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Write a program to input a number. If the number is negative, then again input the number.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Keep on doing so until the user enters a non-negative number.

10. An Armstrong number is a number the sum of the cubes of whose digits is equal to the number itself. An example of an Armstrong number is 153 ($1^3+5^3+3^3 = 153$). Write a program to input a number and find whether it is an Armstrong number.

11. Write a program to input a number $n$ and display factorials of all the numbers from 1 to $n$ using loop.

12. Write a program to input a string and then display this string in reverse order.

13. Write a program that reads a list of numbers from the user and places them in an array of type float. Once the numbers are stored in the array, the program should find their average and print it along with the list of numbers. Use pointer notation
14. Write a menu driven program in C++ to perform the following functions on a binary file “BOOK.DAT” containing objects of the following class:

```cpp
class Book {
    int BookNo;
    char Book_name[20];
  public:
    // function to enter book details
    void enterdetails();
    // function to display Book details
    void showdetails();
    // function to return Book_no
    int Rbook_no() {return Book_no;}
    // function to return Book_name
    int Rbook_name() {return Book_name;}
};
```

i. Append Records
ii. Modify a record for a given book no.
iii. Delete a record with a given book no.
iv. Search for a record with a given Book name
v. Display a sorted list of records (sort on Book No.)
Sociology
Code No. 331

Introduction
The world we live in today, is simultaneously shrinking and expanding, growing and under constant pressure for change. The large-scale changes in use of technology, the great increase in the traffic in culture and political and economic changes are the cause of the changes around the world. Understanding these socio-cultural changes requires studying the social world scientifically and developing some understanding of the character of society.

Sociology is the scientific study of society and its institutions, social interactions, organizations, and groups. It investigates the practices and processes operating in the society. By observing the broad range of activities in society, and getting a space for exploring topics such as family, caste, class, gender, religion, socialization and population dynamics, Sociologists provide a base for in-depth understanding and perspectives on our social order and processes of social change. Sociology provides an important platform which is useful both to personal wellbeing and social development as well. Sociology is among the broadest of the social sciences and thus provides the opportunity for the learners to understand the broad range of social issues operating in the space between individual, community and society.

Rationale
After the Secondary level, a student starts developing some understanding of the nature and character of the society he lives in. Sociology explores all aspects of the social relationship, and it helps to understand why human beings create the societies they inhabit and how they behave with other individuals and groups in which they live. Sociology is considered as another branch of all Social Sciences because it studies the economic, political, anthropological, historical geographical and psychological dimensions of society. Sociology, however, is primarily concerned with the diversity of human relation particularly along the lines of social class, race, ethnicity, gender and age etc.

Ignorance about society is the cause of all social evils. The knowledge, obtained by scientific methods, about society, can contribute to the development of a good society. August Comte, father of Sociology, has said the man would become the master of this social destiny as soon as he develops a science of society.

Change is continuous and permanent. The changes occurring today in the world make Sociology an extremely important subject to study. This course on Sociology will make students familiar with processes of change and development in general and with reference to Indian Society in particular.

Objectives
After completing this course, the learner will be able to:
- define basic concepts in Sociology;
- draw generalizations about various social institutions and social divisions in society;
• explain the process of change and development in society in general and with reference to Indian society in particular;
• extrapolate the different dimensions of Indian society;
• evaluate social realities objectively; and
• develop the ability to perceive social realities scientifically.

Scope and job opportunity

The career potential in the subject of sociology majors is almost limitless. The experts in Sociology are employed by research institutes, public health and various welfare organizations at both national and international level. Students with degree in sociology have the potential of getting secure employment as social researchers, case workers, community organizers, public policy researchers, and data analysts. Sociology also provides scope for going on to law school, social work programme, criminology and public policy etc.

Eligibility conditions

Age: 15 Years

Qualification: 10\textsuperscript{th} pass

Medium of instruction: Hindi, English, Urdu, Gujarati, Bengali, Odia

Duration of the course: 1 Year

Weightage

Theory: 100 Marks

Tutor Marked Assignments (TMA): 20\% Marks of theory

Scheme of studies: Theory (240 hours), TMA (self paced)

Scheme of evaluation: Theory paper 100 marks (3 hours), internal assessment (TMA) (20\% of theory marks)

Pass criteria: 33\% marks in theory

Course content

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Module/Topics</th>
<th>Duration (in hours)</th>
<th>Module Approach/Description</th>
<th>Weightage (marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Module-1 Sociology: Basic</td>
<td>70</td>
<td>The Module is meant to introduce Sociology to the learner. It acquaints</td>
<td>30</td>
</tr>
</tbody>
</table>
## Concepts

1. An Introduction to Sociology
2. Emergency and Development of Sociology
3. Sociology: Its Relationship with other Social Sciences
4. Methods and Techniques of Research in Sociology
5. Social, Community, Association and Institution
6. Social Groups
7. Social Structure and Social System
8. Norms and values
9. Status and Role
10. Cooperation, Competition and Conflict
11. Acculturation, Assimilation & Integration

The learner with the definition of Sociology, its development and growth, relationship with other Social Sciences. It further exposes the learner to certain techniques used in Sociological research. This module also explains important basic sociological concepts.

## Module-II

### Social Institutions and Social Stratification

12. Marriage
13. Family
14. Kinship
15. Economy, Polity and Religion
16. Social Stratification: Hierarchy, Differentiation and Inequality

This module has been designed to acquaint the learner about major social institutions found in a society and also to acquaint him with the system of social divisions based on hierarchy, differentiations and inequality.
| 3. | **Module-III**  
Social change, Socialization and Social Control  
17. Factors of Social change  
18. Processes of Social Change  
19. Socialization  
20. Social control  
21. Social Deviance  
22. Society and Environment | 35 | This module acquaints the learner with the processes of social change in society, and how an individual becomes an accepted member of a society through socialization. It also explains how social control is maintained in a society, and the relationship between society and environment. | 13 |
|---|---|---|---|---|
| 4. | **Module-IV**  
Indian Society  
23. Indian Social Thinkers  
24. Unity and Diversity  
25. National Integration: Concept and Challenge  
26. Indian Society: Tribal, Rural and Urban  
27. Caste System in India  
28. Major Religious communities in India  
29. Major Social Problems of India  
30. Problem of Scheduled Castes and Scheduled Tribes  
31. Problems of other Deprived Sections | 60 | This module acquaints the learner with certain Indian Social thinkers and various dimensions of Indian society. It sensitizes and learner with major social problems of India in general and of certain weaker sections in particular | 30 |
| 5. | **Module-V(A)**  
Status of Women  
32. Status of Women in Indian Society: A | 40 | This module has been designed to acquaint the learner with the status of women from historic to present times. It also explains gender | 15 |
### Module-V(B) Culture

| 32. Culture: Concept and Characteristics | This module has been designed to acquaint the learner with concept of culture and its characteristics. This also enriches the knowledge about different aspects of culture in general and with particular reference to Indian cultural heritage. It also briefly tells us about the influence of media on culture. |
| 33. Indian Cultural Heritage | |
| 34. Cultural Pluralism | |
| 35. Media and culture | |

*Note: Learner has to choose one Module from VA or VB*
Introduction

An introduction to painting is a medium of visual expression. Emphasis is placed upon the exploration of formal and technical concerns. Basic studies include drawing and will explore a variety of subject matter and media directed toward the organization of the two dimensional plane.

It is a powerful way of self-expression providing a sense of fulfillment and achievement, skills to express oneself through colour and proportion and it also helps cultivate an aesthetic sense. It further aims to develop the visual sense of the learner and to help him/her appreciate expressive value of line, texture, space, rhythm etc.

Rationale

This course is provided with necessary inputs of practical work and skill to the learner’s familiarity of the theory of art through the ages. This will further help in aesthetic development, ability to appreciate and discover the beauty of life and integrate it into one’s own personality. Thus, art will make more sense to the Cultural Heritage, environment and develop a creative attitude in day-to-day activities.

Objectives

After completing this course, the learner will be able to:

- explain the visual ideas;
- differentiate between the space division and expressive value of the line;
- distinguish between the various styles of art and their salient features;
- work with harmony and contrast of color;
- draw and illustrate with various materials such as pencils, pastels, water and oil colors, ink etc; and
- explain the visual aspects of composition, rhythm, texture and tonal gradation.

Scope and job opportunity

This field has a large number of opportunities for employment, some of these are:

Illustrator, Printmaker, Designer, Painter, Interior decoration designer, Graphic designer, Designer and teaching etc.

Eligibility Conditions

Age: 15 Years

Qualification: 10\textsuperscript{th} pass
**Medium of instruction:** Hindi, English, Urdu, Bengali, Gujarati and Odia

**Duration of the course:** 1 Year

**Weightage**

**Theory:** 30 Marks

**Practical:** 70 Marks

**Tutor Marked Assignments (TMA):** 20% Marks of theory

**Scheme of studies:** Theory (70 hours), practical (170 hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 30 marks (1½ hours), practical 60 marks (3 hours) and Portfolio Assignment 10 marks, internal assessment (TMA) (20% of theory marks)

<table>
<thead>
<tr>
<th>Mode of evaluation</th>
<th>Duration in hours</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutor Marked Assignment</td>
<td>Self paced</td>
<td>6</td>
</tr>
<tr>
<td>Theory (One paper)</td>
<td>1½</td>
<td>24</td>
</tr>
<tr>
<td>Practical – One paper + Portfolio Assessment</td>
<td>1+1+1=3 hrs.</td>
<td></td>
</tr>
</tbody>
</table>

- **Part I: Object Drawing**
  - Composition and Drawing | 8 |
  - Treatment of Media | 8 | 20 |
  - Presentation | 4 |

- **Part II: Painting and Composition**
  - Arrangement of forms and including emphasis on the subject | 8 | 20 |
  - Treatment of Media | 8 |
  - Presentation | 4 |

- **Part III: Folk Art as Motif**
  - Design and Layout | 8 | 20 |
  - Treatment of Media | 8 |
  - Presentation | 4 |
<table>
<thead>
<tr>
<th>Portfolio Submission</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete work</td>
<td>Self paced</td>
<td>3</td>
</tr>
<tr>
<td>Quality of work</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Presentation</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

**Pass criteria:** 33% in each component.

**Course content**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Modules/Topics</th>
<th>Duration (in hours)</th>
<th>Module Approach/ Description</th>
<th>Description of practicals</th>
<th>Weightage (marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Module-I</strong></td>
<td>30</td>
<td><strong>History and Appreciation of Indian Art</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>1. Art of Indus Valley Civilization</td>
<td></td>
<td>The art objects, belonged to Indus Valley Civilization, are the only available earliest evidence of great tradition of India. The nature form of these art works helps us to imagine that tradition of Indian art must have begun long before 2500 B.C. Changing conditions of politics and religions kept on motivating Indian art through the ages from 4th C.B.C. to 16th C.A.D., leaving a missing link for approximately 1000</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>
years from post Indus Valley civilization to Mauryan period. Indian Art under the patronage of Hindu, Muslim, Buddhist and Jain rulers, flourished till 16th C.A.D. to face a new era of art movement after the Mughals became the rulers of India.

<table>
<thead>
<tr>
<th>2</th>
<th>Module-II History and Appreciation of Indian paintings and sculptures</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Mughal School</td>
</tr>
<tr>
<td>8</td>
<td>Rajasthan School</td>
</tr>
<tr>
<td>9</td>
<td>Pahari School</td>
</tr>
<tr>
<td>10</td>
<td>Deccan School</td>
</tr>
<tr>
<td>11</td>
<td>Company School</td>
</tr>
<tr>
<td>12</td>
<td>Pioneers of Contemporary Art Movements in India</td>
</tr>
<tr>
<td>13</td>
<td>Contemporary Art of India</td>
</tr>
</tbody>
</table>

The 16th century saw a profound change in the stylistic development of Indian art. Art of miniature painting became very popular in Rajputana and in the court of the Mughals. It also influenced the South Indian painters. The Muslim rulers were great admirers of architecture. They enriched Indian art with superb structures, including one of the wonders of the world, Taj Mahal. Under the British
rule, the character of Indian art underwent a thorough change. Beside the painters like self-taught artist Raja Ravi Verma, many Indian artists followed the realistic style of European art. On the other hand, Abanindranath Tagore and his Bengali school tried to bring back classical Indian style with contemporary themes and Jamini Roy modernized the folk style of India. Amrita Shergil, with her passion, art education, was the most influential painter in the contemporary art scene, while Rabindranath Tagore visualized the most modern aesthetics in his painting. These pioneers inspired the next generation of Indian artists to discover their identity in the field of international art.
| 3 | Module- III  
Folk Painting  
14. Folk Painting | 10 | Folk art is considered an essential form of expression in the rural society with typical characteristics of its own. India has an enormous range of folk art which varies in style from district to district. Rural artists are carrying on the traditional technique and style generation after generation with very little modification. These are mainly decorative, ritualistic and utilitarian in nature. These include earthen wire, floor painting, wall painting, stitching on cloth, etc. Some of the Indian folk art is a highly appreciated world over. |
|---|---|---|---|
| 4 | Practical  
Object Drawing  
Topics:-  
• Object Study  
• Nature Study | 65 | Awareness of the fundamentals of Drawing like space, line, tone, volume, perspective, light, and shade, etc. through simple experimental exercises. Study of two or these |
|   |   |   |   |
simple objects including natural and geometrical be arranged together and composed on a given format either vertically or horizontally. Simple objects based on geometrical shapes could include, for example, jug, tumbler, basket, plate, bottle, kettle, vase, book, magazine, cup and box etc. of a variety of materials like terracotta, ceramics, cane, glass, paper, wood, plastic, drapery, leather and metal etc. Natural forms locally available like fruits, vegetables, flowers, leaves, twigs, etc. are to be used. Select any two or three on given objects.

<table>
<thead>
<tr>
<th>5</th>
<th><strong>Painting and Composition</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Topics:-</td>
<td>65</td>
</tr>
<tr>
<td>• Fundamentals of Painting</td>
<td></td>
</tr>
<tr>
<td>• Composition</td>
<td></td>
</tr>
<tr>
<td>• Sketching from Life and Memory</td>
<td></td>
</tr>
<tr>
<td>Free hand drawing directly from life of Human Figures, animals, trees, building, interior of a room, bus stop, market lace, Vehicles, etc. Paint on a given topics e.g. Festival, Fair, Railway station, Man reading a book or newspaper, Playing with your pet, Eating out, Night scene, Rainy day, wedding, Gram Panchayat, Pollution, library, mother</td>
<td>20</td>
</tr>
</tbody>
</table>
and child etc. using imagination and everyday sketches. Starting with Basic Design and various Experiments to understand variety in forms and overlapping, their simplification, colour wheel, variety in colour, hue, tone and texture, rhythm and continuity in application, concept of far etc. all brought together meaning fully in a composition. (Select any one on given topics).

<p>| 6 | <strong>Folk Art as Motif</strong> | 40 | In regional Folk, traditions, art and everyday life go hand in hand. It is both diverse and deep-rooted in the minds of people of India. The genesis of lies mainly in the religious and festival ceremonies, whether it is Mithila Paintings from Bihar, Kalighat Painting from Bengal, Worli Painting from Maharashtra, Phad Painting from Maharashtra, Phad Painting from Rajasthan, Kalamkari from Andhra Pradesh and making of Alapana/Rangoli etc. Select any one form of Regional Folk painting | 15 |</p>
<table>
<thead>
<tr>
<th>7</th>
<th><strong>Portfolio Submission</strong></th>
<th><strong>Home Assignment</strong></th>
<th><strong>Portfolio Submission (Home Assignment)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>1.</strong> Four Object and Nature Studies paper size- ( \frac{1}{2} ) imperial size or (15&quot;x22&quot;) approximate, with one in Line, (ii) one with Tone in pencil and two in colours;</td>
<td></td>
<td>Learners need to submit a portfolio with minimum Twelve works, and one sketchbook (sketchbook should include sketches from memory, nature and objects-animate and inanimate objects etc.) Concept of presentation, which includes dating, mounting and maintaining the work.</td>
</tr>
<tr>
<td></td>
<td><strong>2.</strong> Four Painting and Composition paper size- ( \frac{1}{4} ) imperial size or (15&quot;x11&quot;) approximate size, two compositions in colours and two in mixed media on any four topics which already mentioned.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>3.</strong> Four Regional Folk Paintings in any traditional or locally available materials, (ii)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>
paper size- \( \frac{1}{4} \) imperial size or (15"x11") approximate.

Sketchbook (i) size - 8"/11" or minimum 20 pages of any available paper, (ii) sketches in soft pencil. It should include all the sketches which you have studied so as to make your composition (figurative) and other studies, like landscape, animal-birds, flower, plants etc.

**Materials to be used:** Traditionally or locally available materials.

**Students will have to bring their own painting materials, only the drawing sheet, will be provided by NIOS at the time of examination.**
Introduction
Rapid growth of population coupled with increasing industrial development and all round increase in consumerism throughout the world are posing a serious threat to the environment. People in almost all nations of the world are becoming increasingly conscious of the danger of deteriorating environmental conditions. In view of the critical importance of the environmental issues, it is necessary to introduce Environmental Science as a full-fledged subject at the Senior Secondary level. Environmental Science deals with the relationships between environment and humans and draws upon physical sciences, biological sciences and social sciences.

Rationale
Humans have been concerned with environment since the beginning of civilization. Even our ancient scriptures have emphasized the virtues and values of environmental conservation. Now, it is even more critical than ever before for mankind to have a better understanding of environmental issues to promote sustainable development practices. Environmental science embraces problems related to conservation of natural resources, deforestation, loss of biodiversity, environmental pollution, deterioration of life support systems and issues like global warming, ozone depletion etc. All this and much more is dealt within the subject.

The course covers all the major components of the environment including natural resources, ecological principles and population dynamics, pollution, wildlife conservation, and impact of industrialization. In addition, it also addresses environment related socio-economic, cultural and ethical aspects, which are important to ensure a sustainable future for humans. The course also provides practical insight into environmental management to enable an appreciation of the issues related to sustainable livelihood and human welfare.

Objectives
After completing this course, the learner will be able to:

- trace the origin of earth and evolution of life, and appearance of human species;
- develop concerns for environmental problems;
- describe the ecological principles;
- harmonize environmental concerns with technological and socio-economic issues;
- develop respect for nature and living beings and to help maintain ecological balance;
- take active part in protecting and conserving the environment; and
- assume the responsibilities for change of society.
Scope and job opportunity

This field has a large number of opportunities for employment. Learners can go for higher studies, teaching and research work. **Learners can also join different** National Level Departments or Organizations such as industries (fertilizer plants, mines, refineries, textile mills), social development, research, forest and wildlife management, NGOs, Pollution Control Boards. Public Institutions and Private Industries and Firms, Schools, Colleges, Universities and Ministry of Environment and Forests(MoEF) etc. They can join international organizations such as United Nations Environment Programme (UNEP), Inter-governmental Panel on Climate Change (IPCC) etc.

Eligibility conditions

**Age:** 15 years

**Qualification:** 10\textsuperscript{th} pass

**Medium of instruction:** Hindi, English, Urdu, Gujarati, Bengali and Odia

**Duration of the course:** 1 Year

Weightage

**Theory:** 80 Marks

**Practical:** 20 Marks

**Tutor Marked Assignments (TMA):** 20\% Marks of theory

**Scheme of studies:** Theory (180 hours for core and 30 hours for optional), practical (30 hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 80 marks (3 hours), Practical 20 marks (3 hours), Internal Assessment (TMA) (20\% of theory marks).

**Pass criteria:** 33\% in each component.

Course content

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Modules/Topics</th>
<th>Duration (in hours)</th>
<th>Module Description (Theory)</th>
<th>Description of practicals</th>
<th>Weightage (marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Module-I Environment through Ages</td>
<td>15</td>
<td>This module is intended to enable the learners to visualize the origin of earth and the</td>
<td>The purpose of teaching Environmental Science is not only to acquaint the learner with theoretical knowledge</td>
<td>05</td>
</tr>
<tr>
<td>Module</td>
<td>Description</td>
<td>Credits</td>
<td>Activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
<td>---------</td>
<td>------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Human Society and Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Degradation of Natural Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Environmental Science and Evolution of Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This module contains one unit “Environment-Origin, Evolution of Environment and its use by Humans’. This module has three lessons.

but also to develop practical skills. Development of these skills leads to better understanding of the environment through hands-on experience and mutual reinforcement of theory and practice.

Field exercises and laboratory work develop psychomotor skills.

The present course involves field work, laboratory exercises and short innovative projects to exercise creative thinking and problem solving skills.

The list of practical exercises to be carried by a student as part of this course on Environmental Science is as follows:

a. Field Studies (any three)

b. Laboratory Exercise (Compulsory)

c. Creative Activities (any two)

2. **Module-II Ecological Concepts and Issues**

   4. Principles of Ecology

This module aims to introduce the learner to the principles of ecology and functioning of nature. This

a. **Field Studies**

1. Study a simple ecosystem (suggested habitats pond, river, estuarine, lake,
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Ecosystem</td>
<td>module also deals with natural as well as human modified ecosystems also. This module contains one unit &quot;Principles of Ecology – Composition and Types of Ecosystems&quot;. This module has four lessons.</td>
<td>grassland, forest, and desert) and describe the biotic and abiotic components of the ecosystem.</td>
</tr>
<tr>
<td>7. Human Modified Ecosystem</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 3. Module-III

**Human Impact on Environment**

8. Human Societies

9. Deforestation

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>This module is designed to enable the learner to understand the varieties of problems that have arisen due to increasing human habitations in the form of cities. The module also covers the highly important aspects of deforestation, loss of biodiversity. This module contains</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>07</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>4.</td>
<td><strong>Module-IV</strong></td>
<td>Contemporary Environmental Issues</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10. Pollution – Its Causes, Consequences and Prevention</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11. Environment and Health</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12. Disasters and their Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>13. National Environmental Issues</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14. Global Environmental Issues</td>
</tr>
<tr>
<td>40</td>
<td>This module brings about awareness of the contemporary environmental issues related to natural and man-made problems. Major national and global environmental issues have been described in this module to familiarize the learner with environmental pollution and natural disasters. Environment related human health problems are also highlighted in this module. This module contains two units “Environmental Pollution and Natural Disasters” and “National and Global Environmental Issues” this modules has five lessons.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Field Studies</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Describe the environmental problem of your locality and suggest their remedy.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Visit to different water bodies in your village/ locality and describe their uses and source of water pollution. If any</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Laboratory exercises</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Study of water quality.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. To estimate dust (particulate) deposition on the leaves of road side plants.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Creative Activities</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. To describe: a) climate of an urban areas; b) yearly variation in suspended particulate matter in the same area.</td>
<td></td>
</tr>
<tr>
<td>Module-V</td>
<td>Environmental Conservation</td>
<td>35</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>15. Biodiversity Conservation</td>
<td>This module introduces the importance of and methods of conservation of biodiversity, land, soil, water, energy and natural resources. This module contains one unit “Conservation of Biodiversity and Other Natural Resources (Soil, Water etc.). This module contains four lessons.</td>
<td></td>
</tr>
<tr>
<td>16. Conservation of other Natural Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Soil and Land Conservation</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Module</td>
<td>Learning Objectives</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>---------------------</td>
</tr>
<tr>
<td>6.</td>
<td>Module- VI Sustainable Development</td>
<td><strong>40</strong> This module aims to inform the learner about the concept of sustainable development for integrating environmental conservation with Developmental objectives. This module elaborates the concept of sustainable agriculture including crop rotation, genetic control, organic agriculture, integrated pest management and cleaner technology. This module contains one unit “Sustainable Development with regard to Agriculture and Cleaner Technology”. This module contains four lessons.</td>
</tr>
<tr>
<td>7.</td>
<td>Module- VII Environmental Management</td>
<td><strong>20</strong> This module aims to inform learner about the concept of environment impact assessment and its relevance for promoting environ-friendly</td>
</tr>
</tbody>
</table>

a. **Field Studies**

1. To segregate domestic solid waste into biodegradable and non-biodegradable components.
25. Environment related Institutions and Organizations

26. Environmental Ethics and Gandhian Approach

<table>
<thead>
<tr>
<th>Module-VIII A* Water Resource Management</th>
<th>8.</th>
<th>Fresh water is a costly commodity required not only by humans but also by other living beings. A good deal of fresh water is also required for</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>27. Global Circulation of Water</td>
<td>28. Ground Water</td>
<td>30</td>
<td>development. The learner will also be introduced to various national and international legislation promulgated for environmental improvement and conservation. This module also highlights the need to respect all life forms, ethics and Gandhian approach towards environment conservation. This module contains three units “Legislations for Environmental Improvement and Conservation”, “Organisation related to Environment” and “Environmental Ethics and Gandhian Approach”. This module contains four lessons.</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------------------------</td>
<td>---------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td></td>
<td>agricultural and industrial uses. The hard fact is that the fresh water resources are limited thereby warranting careful management of fresh water resources by avoiding wastage. Emphasis of this module is on fresh water management including ground water resource. Steps to be taken by individuals and communities are highlighted not only to conserve fresh water but also to prevent its wastage and pollution. The learner is also told about the traditional as well as modern methods of water conservation. This module contains two unit “Water as Resource” and “Conservation of Water”. This module contains five lessons.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Module-VIII B**

**Energy and Environment**

<table>
<thead>
<tr>
<th>30</th>
<th>This module exposes the learner to the vital</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12</td>
</tr>
<tr>
<td>27. Importance of Energy in Society</td>
<td>area of energy and both its renewable and non-renewable sources. The learner is also exposed to the concept of alternative sources of energy apart from the traditional ones. The learner is also told about the impact of energy use on environment. A good deal of emphasis is laid on the need and methods of conservation of energy. This module contains two units “Energy use and its impact on Environment” and “Energy Conservation”. This module contains five lessons.</td>
</tr>
<tr>
<td>28. Non-renewable Sources of Energy</td>
<td></td>
</tr>
<tr>
<td>29. Renewable Sources of Energy –1</td>
<td></td>
</tr>
<tr>
<td>30. Renewable Sources of Energy –2</td>
<td></td>
</tr>
<tr>
<td>31. Energy Conservation</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Learner has to choose one Module from VIII A or VIII B*
Mass Communication
Code No. 335

Introduction
The course of Mass Communication at the Senior Secondary level has been designed in such a way that the learners will know the basics of communication and understand the creative activities of media. In 2009, the course was introduced in NIOS to help the specific needs of learners. The curriculum is concerned with various aspects explaining the role of mass media and its linkage with the society. Mass communication plays an influential role in modern society and motivates individuals towards creative thinking to make effective communication. Mass Communication is practical oriented course also empowers the learners to develop abilities of creative writing for print, electronic and new media.

Rationale
The recommendations of National Curriculum Framework (NCF) 2005 for School education were incorporated in the curriculum of Mass Communication. Today the various fields of Mass Communication has emerged as a good career choice. It also promotes understanding of the latest development in the field of mass communication and revolution brought in by the internet, social media, mobile phones and use of computers in communication; in business and interpersonal communications. One of the basic aims of learning Mass Communication at senior secondary level is to develop creative thinking, awareness, problem solving skills, use of media and experiences to write and produce for the various media.

Objectives
After completing this course, the learner will be able to:
- describe basic concepts, principles, forms and terms of Mass Communication;
- explain the role of media in understanding the relationship between mass media and society;
- develop creative writing skills for various media;
- explain the process of media production for radio and television;
- relate mass communication knowledge to solve problems and develop positive attitude;
- demonstrate communication skills and their application in real life; and
- explore exciting career and creative opportunities in media industry;

Scope and job opportunity
This field has a large number of opportunities for employment, some of these are:
- Reporter/Journalist
- Copy Editor
Eligibility conditions

Age: 15 Years

Qualification: 10\textsuperscript{th} pass

Medium of instruction: Hindi, English

Duration of the course: 1 year

Weightage

Theory: 80 Marks

Practical: 20 Marks

Tutor Marked Assignment (TMA): 20\% Marks of theory

Scheme of studies: Theory (245 hours), practical (30 hours), TMA (self paced)

Scheme of evaluation: Theory paper 80 marks (3 hours), practical 20 marks (3 hours), internal assessment (TMA) (20\% of theory marks)

Pass criteria: 33\% in each component

Course content

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Modules/Topics</th>
<th>Duration (in hours)</th>
<th>Module Approach/Description</th>
<th>Description of practicals</th>
<th>Weightage (marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Module-I</td>
<td>20</td>
<td>This module acquaints the</td>
<td>1. Construction of a</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>simple and clear</td>
<td>simple and clear</td>
<td></td>
</tr>
<tr>
<td>Module</td>
<td>Introduction to Mass Communication</td>
<td>1. Introduction to Communication</td>
<td>2. Observation of nonverbal communication in the print media.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------------------</td>
<td>-----------------------------------</td>
<td>----------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Module-II</td>
<td>Print media</td>
<td>5. Introduction to print media</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. What is news?</td>
<td>7. Reporting and Editing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. Language press in India</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10. The Radio Station</td>
<td>11. Formats of Radio Programmes</td>
<td>4. Preparation to conduct an interview.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12. Radio Programme Production</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Television</td>
<td></td>
<td></td>
<td>6. Identification of different formats of radio programmes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7. Differentiation between television and print as two</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Module</td>
<td>Title</td>
<td>Duration</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------------------------------------------</td>
<td>----------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td><strong>Module-V</strong> Advertising and Public Relations</td>
<td>35</td>
<td>This module describes advertising, advertising industry, public relations and various tools used in effective public relations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17. Advertising-an introduction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>18. Advertising-an industry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>19. Public relations - an introduction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20. Public relations-tools</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td><strong>Module-VI</strong> New Media</td>
<td>30</td>
<td>This module describes the characteristics of New Media, New Media industry, target audience of New Media and employment opportunities through New media.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>21. Characteristics of New Media</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>22. New Media - The industry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>23. New media - target audience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>24. New Media - employment opportunities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td><strong>Module-VIIA</strong> Traditional Media</td>
<td>45</td>
<td>The optional modules are designed to introduce with the Traditional Media, communicating effectively through traditional media.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25. Introduction to Traditional Media</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Categorisation of television channels.
9. Identification of different forms of advertisements in the print media.
10. Observation of activities involved in product public relations.
12. Opening an e-mail account.
13. Communicating effectively through traditional media.
15. Telecommunication in India, role of television as a mass medium, television channels and process of television programme production.
| 26. Types of traditional media | types of traditional media and its comparison with Electronic Media. Various ways of communication through Traditional Media are also elaborated in this module. | form and its function in society. |
| 27. Comparison of Traditional Media with Electronic Media | | |
| 28. Communicating through Traditional Media | | |

**Module-VII B**

| Photojournalism |
| Introduction to photography, camera, types of camera, parts of camera, photojournalism and role of a photojournalist is described in this module. |
| 15. Making a photograph |
| 16. Preparing a photo feature |

| Module-VII B* |
| Photojournalism |
| 25. Introduction to Photography |
| 26. The Camera |
| 27. Photojournalism |
| 28. Role of a photojournalist |

*Note: Learner has to choose one Module from VII A or VII B*
Introduction

Computer has become indispensable in today’s life. Computer education provides learners with the knowledge and skills required effectively solve problems. Learning Computer and office applications is an exciting one among learners. This skill is one of the soft skills required by almost all companies. The only software package called out within the top 20 skills across all occupations is Microsoft Office, explicitly required in 15 percent of high-growth, high-salary positions.

The syllabus of Data Entry Operations at Senior Secondary course developed by NIOS to provide knowledge and understanding of basics of computer and use of office applications (Word processing, Spreadsheet and Presentation) and Internet.

Rationale

Keeping in view the importance of data entry operations in recent years, this course has been designed in a manner so as to make the students learn of the basic concepts of computer, Operating System, generalized packages viz., Word Processing, Spreadsheet and Presentation software and also about Internet.

Objectives

After completing this course, the learner will be able to:

- define basic components of computer system;
- explain the features of operating system;
- develop the skills of creating, printing and formatting the documents;
- create, modify and format spreadsheet;
- create PowerPoint presentation; and
- use internet.

Scope and job opportunity

Information technology professionals plan, coordinate and implement computer and information systems within an organization. Typically, they work with other managers within the company to determine the computer-related needs of an organization in relation to computer systems, software, servers, computer networking or network security. Information technology (IT) professionals go on to a variety of careers as IT managers, IT project managers, IT directors and, at the highest levels of business, chief technology officers or chief information officers. Job opportunities for computer information systems managers are keep on increasing. IT professionals, particularly those with specialized technical skills and business management backgrounds, will have the best opportunities for advancement in the field.
Nowadays every organisation is computerised. Government is also promoting digital literacy. So each person should have the basic knowledge of the computer whether he/she is working in office/banking or teaching in a school or doing e-commerce business or designing a website or developing mobile app. Data entry operations course will be eligible for data entry job.

Eligibility conditions

Age: 15 Years

Qualification: 10th pass.

Medium of instruction: Hindi, English and Urdu

Duration of the course: 1 Year

Weightage

Theory: 40 Marks

Practical: 60 Marks

Tutor Marked Assignment (TMA): 20 % Marks of theory

Scheme of studies: Theory (96 hours), practical (144 hours), TMA (self paced)

Scheme of evaluation: Theory paper 40 marks (2 hours), practical 60 marks (3hours), internal assessment (TMA) (20% of theory marks)

Pass criteria: 33% in each component

Course content

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Topics</th>
<th>Duration (in hours Th + Pr)</th>
<th>Module Approach/ Description</th>
<th>Description of practicals</th>
<th>Weightage (marks)</th>
</tr>
</thead>
</table>
| 1.    | Basics of Computer            | 10                          | This lesson explains the concept of Computer and list of input devices and output devices connected to the computer, and classification of | Write down the following details.  
  • Configuration of your system  
  • RAM Capacity  
  • Hard disk Capacity  
  • Different drives available on your system.  
  • At least 5 features of any operating system being used at your study center/home. | 5                 |
<table>
<thead>
<tr>
<th>2. Operating System</th>
<th>24</th>
<th>This lesson aims at explain the features of Windows operating system and file management in Windows. This lesson also explains about install software and hardware.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Basics of Word Processing</td>
<td>65</td>
<td>Word Processing lessons make the learner to develop the skills of creating editing and printing and formatting the documents.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Enter your Bio-data with the following details in Times New Roman, font size 10 and save this file with name ‘Details’ in My documents.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>i. Name :</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Father’s Name:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. Date of Birth:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iv. Postal Address:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>v. Sex :</td>
</tr>
<tr>
<td></td>
<td></td>
<td>vi. Nationality :</td>
</tr>
<tr>
<td></td>
<td></td>
<td>vii. Educational Qualification:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>viii. Work Experience:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Perform the following activities on the above file:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Copy the file on CD and take the CD out.</td>
</tr>
</tbody>
</table>
|                      |    |   • Delete the file from the
1. Open the file “Details” and perform the following activities
   a. Make the headings from serial no. (i) to (viii) bold.
   b. Make the entry at serial no. (v) underline
   c. Make the entry at serial no. (iii) italics.
   d. Select the whole document and increase its font size by 2 points.
   e. Make the line spacing 2.0 (whole document)
   f. Type ‘Bio-Data’ at the top of the document and make it Bold, Center aligned, Underlined. Set the font size to 14.
   g. Type the following at the end:
      Name: ______________
      Place: ______________
      Date: ______________

2. Type a document of at least 2 pages on any topic with the following specifications:
   - Line spacing 1.5
   - Insert space after every paragraph
   - Include at least one numbered list and one bulleted list
   - Perform spellcheck and grammar check on the computer system
   - Insert the CD again and scan it for virus.
If there is any name in the document, it should not appear as a misspelled word.

Title of the document should also be set as the page header.

Footer should include Page number and your name.

Left margin: 1.5”, Right margin: 0.5”, Top margin: 1", Bottom Margin: 1"

3. Create a time table using table in MS Word.

1. Create a data source having rollno, email id and address details. Save this file as Mydata.

2. With the help of Mail Merge facility, use the file 'Invitation' as Main Document, 'Invitees' as Data Source and merge them with the following format:

   <Title> <Firstname>
   <Last Name>
   <Designation>
   <Institute>
   <City>

   Save it as 'Invitation Letter' in the folder 'abc'. Take print out of this Merged Document (invitation letter).

6. Basics of Spreadsheet

<table>
<thead>
<tr>
<th>78 (30+ 48)</th>
<th>Spreadsheet lessons make the learner to</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Create a workbook containing two worksheets.</td>
<td></td>
</tr>
<tr>
<td>(ii) Save the workbook with the</td>
<td>34</td>
</tr>
</tbody>
</table>
| 7. Formatting worksheets | develop the skills of creating, editing, printing and formatting the spreadsheet. This also explains about inserting formulas and functions and charts to your worksheets. | name ‘Marksheet”.

(iii) Rename the worksheets as ‘DataSheet’, and ‘ChartsSheet’,

(iv) Enter the data in DataSheet. Save the worksheet

| 1. Using a Spreadsheet program, enter the employee data like employee name, employee id and salary in a worksheet. Save it as ‘Result’ in the folder ‘abc’ and take its print out.

(i) Insert one column and one row in the above worksheet as per the following:

(ii) Column to be inserted between B and C:

(iii) Data for New column

(iv) Date of Birth
   29-10-1986
   30-07-1991
   05-03-1984
   08-10-1986

(v) Calculate total salary for all the employees using appropriate formula and enter it in row 6 and giving the row heading as Total salary

(vi) Plot a pie chart for the above data. |
<table>
<thead>
<tr>
<th></th>
<th><strong>Formulas, Functions and Charts</strong></th>
<th></th>
<th><strong>Creating Presentation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>8.</td>
<td><strong>Formulas, Functions and Charts</strong></td>
<td>(1) Enter your marksheet data in an Excel sheet and insert suitable graphs to represent the data.</td>
<td>(1) Create a presentation using following slides and save this with the name ‘My School’. Apply animation style to your PowerPoint presentation. Insert Slide numbers and Date in all the slides. Title Slide, Introduction Slide, at least one slide each for (i) School Achievements in Academics, (ii) School Achievements in Sports, (iii) School Achievements in Extra-Curricular activities, Credits slide, Thank You slide.</td>
</tr>
<tr>
<td></td>
<td>(2) Enter the data of expenditure on various items in your family in the worksheet and save it in the name as ‘expenditure’.</td>
<td>(2) Enter the data of expenditure on various items in your family in the worksheet and save it in the name as ‘expenditure’.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(i) Plot a pie chart based on the data in the file ‘expenditure’. Save the file.</td>
<td>(ii) Plot a pie chart based on the data in the file ‘expenditure’. Save the file.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(iii) Open the file ‘expenditure’ and plot a bar chart. Save the file.</td>
<td>(iii) Open the file ‘expenditure’ and plot a bar chart. Save the file.</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td><strong>Creating Presentation</strong></td>
<td>37</td>
<td>(15+ 22)</td>
</tr>
<tr>
<td></td>
<td>This lesson makes the learner to create, edit and format presentation as per the topic given.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td><strong>Introduction to Internet</strong></td>
<td>26</td>
<td>(8 + 18)</td>
</tr>
<tr>
<td></td>
<td>This lesson explains about Internet, different types Internet connections. This lesson also emphasizes the various services provided by Internet.</td>
<td>(1) Create your e-mail ID in at least two free e-mail Service Providers like Yahoo, Gmail, Hotmail etc. Send a mail from one id to the other. Then, from the second id send reply to the first. Include an attachment with the reply.</td>
<td>(1) Create your e-mail ID in at least two free e-mail Service Providers like Yahoo, Gmail, Hotmail etc. Send a mail from one id to the other. Then, from the second id send reply to the first. Include an attachment with the reply.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2) Send a letter to your friend</td>
<td>(2) Send a letter to your friend</td>
</tr>
</tbody>
</table>
inviting him to attend a family function from your new e-mail ID.

(3) Search websites of popular newspaper. and download important events related to sports on a particular day.

(4) Go to NIOS website www.nios.ac.in. Try to find and open the link for MuktaVidyaVani in NIOS website. Take the print out of today’s MuktaVidyavani schedule.

(5) Open the NIOS website of NIOS and make a list of online courses available under academic / vocational.

Note: Weightage will be given to practical record notebook maintenance and viva voce based on the activities.
Tourism
Code No-337

Introduction:
Since tourism is a social, economic, cultural and environmental phenomenon with primary objective of promoting travels outside the city of domicile, it is an important branch of study. In the beginning, tourism was taught along with history in the schools but now it has occupied an important place in the school, college and university curriculum.

Rationale:
Today, tourism is taught as a general as well as a vocational subject and derives its basic theoretical inputs from history, geography, economics, sociology, psychology, philosophy and management. Thus, students pursuing senior secondary courses are now provided with an opportunity of understanding the complex functioning of the tourism industry. At the senior secondary stage, tourism has become a natural choice of students to build professional career as most of the frontline jobs can easily be performed by the senior secondary qualified students.

Objectives:
After completing this course, the learner will be able to:

- draw the attention of peace, fraternity and mutual understanding among the people of different cultures and faith;
- broaden the understanding of the various types of tourism and tourist industry;
- give an in-depth description of the rich cultural heritage and its contribution to the development of tourism;
- generate interest and curiosity and also be familiar with a wide range of tourist attractions in India;
- provide sufficient knowledge of geographical features like topography, landforms, climatic conditions, sea routes and highways which will help them in guiding tourists;
• infuse a sense of seriousness and work towards achieving nation’s goals and objectives of attracting tourists to the country;
• explain the use of management principles for making tourism resources meet the expectations of tourists and service providers;
• provide a holistic development by implementing the principles of sustainable tourism for the present and future generations;
• explain the significance of tourism industry for economic growth, human development, social harmony, international understanding, regional development and expansion of knowledge and wisdom;
• develop and appreciate the roles and functions of modern travel agency and tour operations in building the image of destination and country and in creating employment opportunity and generate foreign exchange for the country’s economic growth and
• appreciate the contributions of hospitality industry in extending the hospitality services to the guests and in generating revenue for the country.

Scope and Job Opportunity:

This field has a large number of opportunities for employment, some of these are Air hostess, Airline employee / Airport staff, Customer service manager, Entrepreneur, Event manager, Ticketing staff, Tour Guide, Tour Operator, Travel Agent, Travel Agency staff, Travel and Tourism Consultant, Tour Manager and Tourism Promoter / marketer etc.

Eligibility condition

Age: 15 Years

Qualification: 10th pass

Medium of instruction: English and Hindi

Duration of the course: 1 year

Weightage

Theory: 100 Marks
**Tutor Mark Assignment (TMA):** 20% Marks of the theory

**Scheme of studies:** Theory (240 hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 100 marks (3 hours), internal assessment (TMA) - 20% of theory marks (self paced)

**Pass criteria:** 33% marks in theory

**Course content:**

<table>
<thead>
<tr>
<th>S. No</th>
<th>Module/Topic</th>
<th>Duration (in hours)</th>
<th>Module Approach/Description</th>
<th>Weightage (marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Basics of Tourism</strong></td>
<td>50</td>
<td>This module is developed to acquaint learners about the basic concepts of tourism. The learners would be able to understand tourism as a business. They will be introduced to different aspects of tourism such as excursion, holidays, sightseeing, mass tourism etc. They will be able to develop perceptions of how people and the world understand the concepts of travel, holiday and different modes of travel. They will be able to learn what tourism products are based on and how they are influenced by economic and social developments.</td>
<td>20</td>
</tr>
<tr>
<td>1.</td>
<td>Evolution of Tourism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Tourism Industry and its Organization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Impact of Tourism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Fundamentals of travel and Tourism Geography</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Transport for Tourism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td><strong>Cultural Dimensions of Tourism</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Understanding Indian culture and heritage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Performing Art Heritage in India</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Indian Architecture as Tourist Attractions</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 40 | This Module is designed to familiarize the learners with the cultural dimensions of tourism. The Module gives an overall picture of the understanding of Indian culture and heritage with a special emphasis on the art and architecture. This is an attempt to help to understand Indian culture and heritage which should further help in providing an understanding to the tourist visiting that place. |

<table>
<thead>
<tr>
<th>3</th>
<th><strong>Cultural and Heritage Aspects of Tourism in India</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>9.</td>
<td>Culture and Heritages in India: Hinduism, Jainism and Buddhism</td>
</tr>
<tr>
<td>10.</td>
<td>Culture and Heritages in India: Sikhs, Islam and Christianity</td>
</tr>
<tr>
<td>11.</td>
<td>Cultural Attractions in India</td>
</tr>
</tbody>
</table>

| 41 | In this module we will take up the cultural and heritage aspects of tourism. The objective over here is to familiarize the learner with the countries heritage tradition from time immemorial. This important social and cultural input helps in raising the number of tourists coming to the country as they become familiar with the history of the country and can connect with the places they are visiting or the fine arts or performing arts they are enjoying which has its genesis in the past. |

<table>
<thead>
<tr>
<th>4</th>
<th><strong>Natural Diversity as Tourist Attraction</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>12.</td>
<td>Natural Tourist Attractions in India</td>
</tr>
<tr>
<td>13.</td>
<td>Growth and Patterns of</td>
</tr>
</tbody>
</table>

| 41 | This module focuses on the natural diversity as tourist attraction in India. This aims at acquainting the learners with how the diverse geographical locations boost tourism. This module also throws light on |

| 16 | |
| 18 | |

209
<table>
<thead>
<tr>
<th>5</th>
<th><strong>Management of Tourism Business</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>14. Growth and Patterns of tourism in India</td>
<td>the growth and development of tourism not only in India but around the world as well.</td>
</tr>
<tr>
<td>15. Tourism Management</td>
<td>This module aims at developing the understanding of basic tourism management principles and practices among the learners with regard to enhancing their practical decision-making skills and abilities and creating a sustainable and professional management culture in tourism sector. Besides providing the basic understanding of the principles, process and practices of all major functional areas of management like marketing, finance and human resources, the module strives to enhance the learner’s communication skills and develop their personality. It also highlights the impacts of tourism and emergence of tourism as a sunrise service sector.</td>
</tr>
<tr>
<td>17. Human Resource Management-II</td>
<td></td>
</tr>
<tr>
<td>18. Communication and Personality Development</td>
<td></td>
</tr>
<tr>
<td>19. Tourism Marketing</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6A</th>
<th><strong>Travel and Tour Operation Business</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>20. Fundamentals of Travels Agency and Tour Operation Business</td>
<td>This module describes the various dimensions of travel agency business with relevant examples. Knowledge about the travel related services like hiring a car or bus, booking and cancellations of air, train and bus tickets and booking hotel room for you or friends and relatives Knowledge about the relationship between the wholesaling and retailing in tourism services through travel agency for providing complete travel solutions.</td>
</tr>
<tr>
<td>21. Functions of Travel Agencies and Tour Operations</td>
<td></td>
</tr>
<tr>
<td>22. Itinerary Planning and Tour Packaging</td>
<td></td>
</tr>
<tr>
<td>6 B</td>
<td><strong>Hospitality Management</strong></td>
</tr>
<tr>
<td>-----</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>20.</td>
<td>Hospitality and Catering Industry</td>
</tr>
<tr>
<td>21.</td>
<td>Front Office Operations</td>
</tr>
<tr>
<td>22.</td>
<td>Supporting Operations of Hotel</td>
</tr>
</tbody>
</table>

| 28 | This module gives description of the essential of Hospitality industry to make the learner familiar with its management. This helps in understanding, importance of hospitality sector and its operations. Awareness about the sectors being involved directly, indirectly with the hospitality sector supporting tourism. |

211
Introduction to Law
Code No. 338

Introduction

In our daily life, we often come across situations where legal advice and interpretations are required. In such cases, basic legal knowledge and skills come in very handy. The growing number of colleges across India, the constantly improving quality of Law education and increasing enrolment of students in Law with every passing year are indicative of the changing trend. This is an opportunity for NIOS to fulfill the tremendous need created by this trend.

Legal education in India refers to the education of lawyers before entry into practice. It is offered by the traditional universities as well as by specialized law universities only after completion of a graduate degree or as an integrated five years degree, which includes a graduate degree. As a matter of legal principle, “Ignorance of law is no excuse” and you have to bear the consequences of breaking any law as applicable. This makes basic introduction and information of legal issues and its implications mandatory as well as beneficial. The course has been designed to develop an insight into various legal processes and practices.

Rationale

Every law is enacted in the manner legally laid down for the purpose by the competent authority designated to legislate without any such procedural laws. If we stop here, there is no complication and nobody gets any justification to resist any law that has been lawfully enacted. But in that case, we would leave the floodgate wide open for an oppressive regime to frame laws to perpetuate its reign. Any law that serves purposes other than public becomes questionable instantly. This makes justness an essential component of the law, without which the legality of the law could well be questionable.

The law determines and enforces one’s rights within a politico-legal setup. It is not possible to press rights into service against their sources. This is to say that the laws can be protested or can be challenged within the framework of the law. In other words, laws can be violated with impunity no matter how much hardship it causes. The objective of the legislation is to minimize pain and to provide happiness to the maximum number. According to Ayn Rand, “Happiness is that state of consciousness which proceeds from the achievement of one’s values.”

“Laws are the dictates by which the State governs its prospects/people but are also binding on the State. By enacting the law the State also undertakes to obey them. But laws are not enacted for their sake. There has to be a clear purpose behind each piece of enacted law because all laws by their very nature have the tendency to impose some restrictions or mount some obligation on someone or other. Hence, introducing Law at senior secondary level shall equip learners with basic information in the legal domain that affects them daily. It will also help them to execute their duties while protecting their own and other’s rights.
Objectives

After completing this course, the learner will be able to:

- develop an insight into various legal processes and practices;
- sensitise socio economic, political legal, ethical and moral values emerging from national and global concerns;
- act and demonstrate as law abiding, responsible citizens and agents of democratic governance;
- define the legal institutions and organs of state through which the power is structured and exercised;
- rewrite brief ideas on the underlying legal philosophy and also different types of legal system;
- explain the meaning and significance of legal phenomena and social infrastructure;
- explain various aspect of “We the People” and their impact on the development of the nation; and
- create interest among themselves to learn the basic theory and principles of law.

Scope and job opportunity

The law affects all aspects of our life. It protects us right from the mother’s womb to our education, service, marriage and other important events of life. Law plays a major role in our everyday lives, right from buying a newspaper or a bottle of milk or any other big or small item necessary for our life. The law is so important for our life that it becomes necessary to understand various aspects of the law. Moreover, there is a movement towards introducing ‘Law’ as a career option at increasingly earlier age. From the traditional approach of introducing ‘Law’ as a post-graduation Three years Course it is now being offered as Five years Integrated Course after +2. Studying ‘Law’ as a Course at Senior Secondary level will not only help to acquire working knowledge of Law at the early stage but also will help in higher studies in Law discipline.

Persons possessing Law degree can work as legal counsel and legal advisors for the corporate sector, firms, organizations, legal persons, individuals, and families. Law degree holder can also work as Legal Advisors in Department of Legal Affairs and Legislative Counsel in Legislative Department. Those who are interested in academic jobs can take up jobs in any University or Institute offering law courses to students

Eligibility conditions

Age: 15 Years

Qualification: 10th pass

Medium of instruction: Hindi, English and Urdu

Duration of the course: 1 Year
Weightage

**Theory:** 100 Marks

**Tutor marked Assignments (TMA):** 20% Marks of theory

**Scheme of studies:** Theory (240 hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 100 marks (3 hours), internal assessment (TMA) (20% of theory marks).

**Pass criteria:** 33% in each component.

### Course content

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Module/Topics</th>
<th>Duration (in hours)</th>
<th>Module Approach/Description</th>
<th>Weightage (marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Module-I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Concept of Law</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Meaning of Law</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Classification of Legal System</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Personal Law I: Hindu Law and Muslim Law</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Personal Law II: Christian, Parsi and Jewish Law</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>35</td>
<td>The purpose for this module is to acquaint the learners with the meaning of Law, the Legal Systems that prevail in the globe and the various classifications of legal systems.</td>
<td>14</td>
</tr>
<tr>
<td>2.</td>
<td>Module-II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Functions and Techniques of Law</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Normative Functions of Law and Social Control</td>
<td></td>
<td>Law is omnipotent and accordingly it has many and varied functions. This module is designed to familiarise the students with the functions and techniques of law which would enable them to understand the application of law.</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>6. Principles of Natural Justice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Techniques of Law and Remedies I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. Techniques of Law and Remedies II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Module</td>
<td>Title</td>
<td>Duration</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-------</td>
<td>----------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Module-III&lt;br&gt;Classification of Law</td>
<td>30</td>
<td>This module is designed for the purpose of making the students aware about the various sources and classification of law. The basic understanding about the different categories in the types of law can be learned by the learner and their division is also available in this module.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Module-IV&lt;br&gt;Indian Court System and Methods of Resolution of Disputes</td>
<td>30</td>
<td>The module provides for the legal mechanism that is meant to resolve disputes and problems that arise in the day to day transactions even between the neighbours and those who reside in the community through the intervention of Courts, Tribunals and alternative means of dispute resolution.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Module-V&lt;br&gt;The Constitution of India (I)</td>
<td>35</td>
<td>This module would give an idea of the structure of Indian Constitutional system. This will also acquaint the learners with the salient features of the Constitution. It has also been designed to develop among learners an insight into the Fundamental Rights, Fundamental duties and Directive Principles of the State Policy enshrined in the Constitution.</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Module - VI&lt;br&gt;The Constitution of India (II)</td>
<td>35</td>
<td>The purpose of this module is to familiarise the learners with powers, functions and working of the principal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Functionaries of three organs of the government both at the Union and the State (provincial) level as embodied in the Indian Constitution.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td><strong>Module – VII A</strong>*&lt;br&gt;Environmental Law, Role of Citizens, Police and Administration&lt;br&gt;24. Environmental Law&lt;br&gt;25. Sustainable Development&lt;br&gt;26. General Principles of Environmental Law&lt;br&gt;27. Contemporary Developments</td>
<td>40</td>
<td>The module is designed to generate awareness about the legal mechanism to protect the environment and general principles of Environmental Law as well as the role of citizens in protecting the environment. The module also lays emphasis on the role of citizens in maintaining a good social order, Police System and the need for manpower training.</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Module – VII B</strong>*&lt;br&gt;Law Relating to Consumer Protection and Right to Information&lt;br&gt;24. Consumer Protection&lt;br&gt;25. Unfair Trade Practices&lt;br&gt;26. Consumer Redressal Agencies&lt;br&gt;27. Consumer Activism</td>
<td>40</td>
<td><strong>Approach:</strong> The emphasis in this module is given to explain the meaning of Consumerism and to inform about the rights of consumers as well as generate awareness about the Right to Information.</td>
<td></td>
</tr>
</tbody>
</table>

*Note: Learner has to choose one Module from VII A or VII B*
Library and Information Science  
Code No. 339  

Introduction  
The Library and Information Science course is taught at different levels in India such as Certificate, Diploma, Bachelor’s, Master’s and at doctoral level, but as an vocational course. We have introduced this course as an academic subject at Sr. Secondary level. Library and Information science is the study of different aspects of library and Information Science such as Library, Information and Society, Information Sources, Organization of Information Sources, Library and Information Services, Management of Libraries and Information Retrieval System. We have included all these aspects in the present course.

Rationale  
We are living in the information society where information based occupations have been on the rise, as information society demands work force that can use information technology as a tool to increase productivity and creativity. This involves identifying reliable sources of information, accessing them, selecting the requisite information, synthesizing and communicating it effectively. To search, locate and use such information is only possible if one has the ability to use the available information access tools. Library and Information Science teaches an individual about the information resources and their effective use. Library and Information Science learning imparts necessary skills in the individual to be an independent learner.

The National Curriculum Framework (NCF) 2005, while stressing on the importance of libraries states "It is important that future planning treats the library as an essential component of the school at all levels. Both teachers and children need to be motivated and trained to use the library as a resource for learning, pleasure, and concentration ". Keeping in view the above we have introduced Library and Information Science as a course at senior secondary level which will fulfill the long felt need of developing skills in learners to identify, locate, evaluate and use needed information efficiently. The course will impart some of the basics of Library and Information Science to those who are aspiring to pursue higher studies in Library and Information science.

Objectives  
After completing this course, the learner will be able to:

- explain information storage, searching and retrieval system;
- develop library and information related skills;
- inculcate interest in the library and information science to opt this subject as a career;
- explain various information sources and their use;
- organize different sources of information;
- develop necessary skills for utilizing the library;
• use of ethical information; and
• use various information communication technology (ICT) tools and techniques in library and information science.

**Scope and job opportunity**

There is lot of scope for further study in library and information science at Bachelors, Masters and Doctoral level. This field has a large number of opportunities for employment in the libraries, some of these are:

• Public/Government libraries
• Universities/Colleges schools and other academic institutions
• News agencies and organisations
• Private organisations and special libraries
• Foreign embassies
• Photo/film/radio/television libraries
• Information centres/documentation centers
• Companies and organisations including IT sector with large information handling requirements
• Museums and galleries, which have reading rooms and research facilities

**Eligibility conditions**

**Age:** 15 Years

**Qualification:** 10\textsuperscript{th} Pass

**Medium of instruction:** Hindi, English and Urdu

**Duration of the course:** 1 Year

**Weightage**

**Theory:** 80 Marks

**Practical:** 20 Marks

**Tutor Marked Assignments (TMA):** 20 \% Marks of theory

**Scheme of studies:** Theory (192 hours), practical (30 hours), TMA (Self paced)

**Scheme of evaluation:** Theory paper 80 marks (3 hours), practical 20 marks (3 hours), internal assessment (TMA) (20\% of theory marks).

**Pass criteria:** 33\% in each component.
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Modules/Topics</th>
<th>Duration (in hours)</th>
<th>Module Approach/Description</th>
<th>Description of practicals</th>
<th>Weightage (marks)</th>
</tr>
</thead>
</table>
| 1.     | **Module-I**                                       | 36                  | This module covers various types of libraries and information centres. It provides a bird's eye view of how these libraries are playing active role in acquiring, organizing and disseminating information to the user community for study, research and development, recreation and cultural development. | 1. Observation of Library/Information Centre.  
2. Observation of an Automated Library and its features  
3. Services of Public Libraries and Information Centres | 15                |
|        | **Library, Information and Society**               |                     |                                                                                           |                                                                                           |                   |
|        | 1. Library and Information Centres: Concepts and Role in Society |                     |                                                                                           |                                                                                           |                   |
|        | 2. Types of Libraries and Information Centres: Public, Academic, Special and National |                     |                                                                                           |                                                                                           |                   |
|        | 3. Modern Library: Automated, Digital, and Virtual |                     |                                                                                           |                                                                                           |                   |
|        | 4. Five Laws of Library Science                    |                     |                                                                                           |                                                                                           |                   |
| 2.     | **Module-II**                                      | 48                  | Libraries form vital part of world’s system of education. Through books, films, a/v media, etc., libraries make available the knowledge that has been accumulated through ages. People from all walks of life use | 4. Features of primary and secondary sources of information  
5. Abridged and unabridged English language dictionaries  
6. Answering reference queries | 18                |
<p>|        | <strong>Information Sources</strong>                            |                     |                                                                                           |                                                                                           |                   |
|        | 5. Overview of Information Sources                 |                     |                                                                                           |                                                                                           |                   |
|        | 6. Types of Information Sources                    |                     |                                                                                           |                                                                                           |                   |
|        | 7. Reference Sources                               |                     |                                                                                           |                                                                                           |                   |
|        | 8. E-Resources                                     |                     |                                                                                           |                                                                                           |                   |</p>
<table>
<thead>
<tr>
<th>Module-III</th>
<th>Module-IV</th>
<th>Module-VA*</th>
</tr>
</thead>
<tbody>
<tr>
<td>library resources for their work.</td>
<td>This module introduces the basics of preparation and organization of library material for use.</td>
<td>This module aims at imparting knowledge in library</td>
</tr>
<tr>
<td>36</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>15. Library System and Management</td>
<td>administration and management activities. It covers policies and procedures related to acquiring library material, library staff and promotion of library use.</td>
<td>14. Career in librarianship</td>
</tr>
<tr>
<td>16. Library Staff</td>
<td></td>
<td>15. Periodicals publications</td>
</tr>
<tr>
<td>17. Library Users</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Librarianship as a Career</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Module-VB</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Information Retrieval Systems</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Information Retrieval System: Concept and Scope</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Information Retrieval Tools: Catalogue, Index, Subject Heading Lists</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Search Techniques: Basic and Advanced</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Web Based Search</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This module aims to create knowledge and required skills in the learner for searching information in print as well as digital media scattered all over the world.</td>
<td>16. Types of indexes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17. Web based search</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18. Navigational Search</td>
</tr>
</tbody>
</table>

*Note: Learner has to choose one Module from VA or VB*
المقرر الدراسي للغة العربية لمرحلة الثانوية العامة

يدرس "المعهد القومي للتعليم المدرسي المفتوح" اللغة العربية منذ 2007 م بكل نجاح، لقد تزايد عدد دارسي اللغة العربية تزايداً مطرداً خلال السنوات الأخيرة، نتيجة عن ذلك، بادر المعهد نفسه إلى إدراج اللغة العربية كمادة مستقلة اختيارية وأصلية في مرحلة الثانوية العامة لتفتح آفاق وظيفة دارسي اللغة في الهند وخارجها. لقد أصبح العالم كله اليوم قريناً صغيراً، وتحلل اللغة العربية في مثل هذه البيئة أكثر أهمية من أجل تطعمنا إلى البلدان العربية التي توفر وظائف مؤقتة، وتسهيلات لائقة للمتعلمين الخفيفين، وعلاوة على ذلك، توفر اللغة العربية تسهيلات وامكانيات للحصول على الوظائف في المؤسسات والمنظمات الدولية لكونها إحدى اللغات الرسمية للأمم المتحدة، ورغبة في العربية لغة قادرة نطقها ملايين الناس الذين يدرسون المواد من العلوم، والاتصال، والتكنولوجيا، والطب باللغة مباشرة، وفي ضوء تقرر اللغة من أوعز اللغات المستخدمة في الحاسوب والشبكة الإلكترونية (الكومبوتر والإنترنت).

وتؤدي اللغة العربية دوراً هاماً في تعزيز العلاقات العربية الهادفة في مجالات الثقافة والتجارة، والديانة، والأدب، ويشتغل اليوم ملايين الهنود في دول الخليج العربي أمستداً، وأطباء، ومهندسين، ومدراء، وإداريين، وعمال موظفين في المنازل والمساكن، وهم الذين يزودون البلاد بمكمل هائلة من الخدمات الأجنبية، ولذن، تدريس اللغة العربية في مراحل الدراسات العليا من أهم متطلبات العصر، لأها من أروع اللغات الحية الآن.

بالأغلب، طلاب التفاضل الإسلامي هم الذين يدرسون اللغة العربية في المراكز التعليمية الإسلامية بالهنود، ولكن عدد كبير من طلاب التفاضل العصري يرغب في تلقي العربية نظراً لمنكشفيات العصر، وقد روعي مستوى أطول في الطلاب في إعداد دروس هذا الكتب، إضافة إلى رعاية الطلاب الذين يجوا في امتحانات المعهد سابقاً.

أهداف هذه الدورة كما يأتي:
- تولي مقاومة أساسية للقواعد والتصريف.
- النهوض بالطلاب مع وسائل التعليم الحديثة.
- تمكين الطلاب من إثراء المفردات العربية المتعلقة مختللف النروج ومجالات الحياة.
- تدريهم على تكوين جمل بسيطة وغير معقدة.
.chomp

تعريف موجز بالمقرر الدراسي للغة العربية لمرحلة الثانوية العامة:

1. الكتاب: جزء واحد مع التدريبات.
2. يتضمن الكتاب خمسة وثلاثين درساً (35) درساً وعشرون درساً (25) من مجموع الدروس الأصلية،
وفمشاء مع خمسة دروس من مجموع الدروس الاختيارية.
3. ويشتمل مجموع الدروس الأصلية على ثلاثة وعشرين درساً من قسم النثر، ودرسين من قسم النظم،
وتشتمل مجموع الدروس الاختيارية على أربعة دروس من قسم النثر، ودرس من قسم النظم مع خمسة
دروس أخرى على هذا النمط.
4. وأما حقول الدروس فهي كمباشر:
- الاجتماع
- السياسة
- التاريخ والثقافة
- العلوم والتكنولوجيا
- الرياضيات وتكنولوجيا المعلومات
5. تعالج الدروس من القواعد العربية المواضيع التالية:
(ألف) الت صف: التام والناقص، الأمر والنهائي، المعروف والجهول، وأدوات الشرط، وأوزان الثلاثي المزيد
 فيه: إفعال، تفعيلة، مفاعلة، واستفعال.
(ب) الحروف: الاستثناء، الفعل المعروف والفعل الجاهل، اسم التفضيل، اسم الظروف المكاني والزماني،
اسم الآلة، والأعداد والتعبير، المصفوف، وغير المصرف، الجمع المكرر، الجمع المذكور، الجمع المتماثل، والجمع
المؤثر السام، الضمير المتصل، الضمير المنفصل.
محتويات الدورة العربية
وفي نهاية كل درس جمل عربية وإنكليزية للتدريب على الترجمة العربية الإنكليزية/الأردية وبالعكس.

الوحدة الاختيارية
(ألف) خمسة دروس عن الصحافة ووسائل الإعلام
(ب) خمسة دروس تعتمد على الترجمة (عربية إنكليزية/أردية وبالعكس)
سیاست‌گذاری در سطح کنفدراسیون

تعارف:

نشریه‌های کنفدراسیون که منابع مختلفی را در زبان‌های مختلفی به‌کارمی‌اند، اما در اینجا به زبان‌های محلی کاربرد دارند. که منابع مختلفی را در زبان‌های مختلفی به‌کارمی‌اند، اما در اینجا به زبان‌های محلی کاربرد دارند.

با توجه به اینکه تمام این کارآمدها بی‌بی‌سی است، این مقاله واقعاً ضرورت داشته‌باشد که کارآمدها و روابط مشترک کم‌توجه به دانشگاه‌های کنفدراسیون، بی‌بی‌سی را در اینجا نماید.

فیلتر این اطلاعات از این‌که به شکل منطقی به شکل دیگری کاربرد ندارند، البته این مقاله در اینجا به این اطمینان، که کارآمدها و روابط مشترک کم‌توجه به دانشگاه‌های کنفدراسیون، بی‌بی‌سی را در اینجا نماید.

که می‌تواند به مدت کم‌توجه به دانشگاه‌های کنفدراسیون، بی‌بی‌سی را در اینجا نماید.
سنہرے کتاب کی طور پر فارسی کی رواج کتابوں کی تاریخ کا نیا درج ذیل امور معلوم ہے کے گھر میں:

(1) دری کتاب درس پر مفت شامل ہے اور قومی کتاب کی تاریخ-
(2) کتاب 30 اساتذہ پر مشتمل ہے جن میں 24 اساتذہ اسپیکر ہیں۔
(3) کتاب درج ذیل اقدار پر ضرورت ہے:
الف: اخلاق
ب: جامع
ج: تاریخ اور رواج
د: سانس اور انبارات اور دین
ء: صحت اور وکیل
(4) اسیا کاندیارا اور گرگانو، عام معلومات اور کتابوں پر ضرورت ہے جن میں اخلاقی اقدار اور اہداف پر خصوصی دسیان رہی ہے۔
الف: قزحہ اساتذہ پر علاوہاور (گراس) معیش معروف فلیٹ بھی جو اورچرک اساسي کا استعمال کیا جا سکے۔
ب: کم اسی اسایاہس، فلیٹ قوندر اور اضافی عناصر اور اندراج اور ان کے برہنے پر پچھیدی گیا ہے، چونکہ کلہوں کے استعمال پہچانو پر ایک گیا ہے۔

مضامین/مواد کے اقتباس پر نظر کی تفصیل:

نثری وشعری ادب

<table>
<thead>
<tr>
<th>اعداد</th>
<th>تفصیل</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>تین ہزار سے دو آئینے کا ترتیب</td>
</tr>
<tr>
<td>2</td>
<td>اشعاری نظم اور ترجمہ (دوشنبے سے آیک)</td>
</tr>
<tr>
<td>3</td>
<td>کمی ایک نثری شن شکیل کا خلاص</td>
</tr>
<tr>
<td>4</td>
<td>کمی الکل کا مرکزی نثری شن شکیل مکمل صفحات</td>
</tr>
<tr>
<td>5</td>
<td>دری امثال پر پندرہ سوالات</td>
</tr>
</tbody>
</table>

= 12
<table>
<thead>
<tr>
<th>رقم</th>
<th>سوال</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>فاریکیے اردو میں تحریر</td>
</tr>
<tr>
<td>2</td>
<td>اردو میں فاریکیے شک تحریر</td>
</tr>
<tr>
<td>3</td>
<td>غلط مکمل گی اصلاح</td>
</tr>
<tr>
<td>4</td>
<td>خالی گھٹنے کو چھکرنا</td>
</tr>
<tr>
<td>5</td>
<td>الفاظ کا جملہ بنے استعمال</td>
</tr>
<tr>
<td>6</td>
<td>افعال اوران کا گردان</td>
</tr>
<tr>
<td>7</td>
<td>پندرہ</td>
</tr>
<tr>
<td>8</td>
<td>میتہ_BASE</td>
</tr>
<tr>
<td>9</td>
<td>منتقلہ_بلاڈ</td>
</tr>
<tr>
<td>10</td>
<td>مقرنوں</td>
</tr>
</tbody>
</table>

اس کے پندرہ سوالوں کی حجت دلی سوال (18X1) 18
Malayalam
Code No. 343

പെരുമാനം

മലയാളത്തിലെ വാക്യങ്ങളിൽ സംഗതിയും സംസ്കൃതിയും മനുഷ്യ വിജ്ഞാനത്തോടെ മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതി�ും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതിയും മനുഷ്യനായി സംസ്കൃതി�ും
കഥകളിൽ, കവിതയിലെ, ചിത്രകലയിലെ, സാമൂഹ്യകലയിലെ, പരിഷ്കരണകലയിലെ, കാബോളഖിലെ, കുംബസാഹിത്യത്തിലെ, രാസായനികസാഹിത്യത്തിലെ, വിഷമാണികയിലെ, പ്രവാചകനിയന്ത്രികയിലെ, രചയിതാവിലെ വിശിഷ്ടതകളാണ്‌ പ്രതിവാരം മനസ്സിലാക്കുന്നത്. 

1. പ്രത്യേകിച്ച് പുരോഹിതന്റെ ദേവോപ്രതിവാരം അഥവാ പരിഷ്കരണക്കാരന്റെ പരിഷ്കരണ വിശ്വാസം ഭാരതീയമായ സാമൂഹ്യരീതിയിലെ പരിഷ്കരണമാനം വിശ്വസിച്ചിരിക്കുന്നു.

2. വിഷമാണിക സാഹിത്യത്തിലെ പ്രവാചകനിയന്ത്രികയിലെ പ്രതിവാരം വിശിഷ്ടമായ വിദേശസാഹിത്യത്തിലെ പ്രതിവാരം വിശ്വസിക്കുന്നു.

3. പ്രത്യേകിച്ച് രാസായനികസാഹിത്യത്തിലെ രചയിതാവിലെ പ്രതിവാരം വിശിഷ്ടമായ രാസായനികസാഹിത്യത്തിലെ രചയിതാവിലെ പ്രതിവാരം വിശ്വസിക്കുന്നു.
• ഓരോ സമയം പ്രത്യേകിച്ച് ഉത്തരക്കാരനായി കാലിക പ്രവാചകനായും കമന്റുകൾ പ്രയാണവും അനുവദിക്കുന്ന പ്രവചകനായും ഭാവിയിൽ ആഭരിപ്പിക്കപ്പെടുന്ന കാലിക പ്രവാചകനായും അനുവദിക്കുന്ന പ്രവചകനായും പ്രവചകത്തിൽ പ്രവചിക്കാനാരംഭിച്ചു. സമയത്ത് അടുക്കുന്ന പ്രവചകനായും പ്രവചകനായും നിലനില്ക്കുന്ന പ്രവചകനായും അനുവദിക്കുന്ന പ്രവചകനായും പ്രവചിക്കാനാരംഭിച്ചു.

• പ്രവചകനായും പ്രവചകനായും ഉത്തരക്കാരനായി കാലിക പ്രവാചകനായും കമന്റുകൾ പ്രയാണവും അനുവദിക്കുന്ന പ്രവചകനായും ഭാവിയിൽ ആഭരിപ്പിക്കപ്പെടുന്ന കാലിക പ്രവാചകനായും അനുവദിക്കുന്ന പ്രവചകനായും പ്രവചിക്കാനാരംഭിച്ചു. സമയത്ത് അടുക്കുന്ന പ്രവചകനായും പ്രവചകനായും നിലനില്ക്കുന്ന പ്രവചകനായും അനുവദിക്കുന്ന പ്രവചകനായും പ്രവചിക്കാനാരംഭിച്ചു.
• മുഖ്യമായി, വിജ്ഞാനഭൂതിക്കുന്ന വിദ്യാലെയിലെ അഭ്യസ്യത്തിനു ഉപയോഗിക്കപ്പെട്ട പാഠാധ്യായങ്ങളുടെ അവതാരങ്ങൾ ഭരണം നൽകുന്നു.

• പ്രായോഗിക പ്രശ്നങ്ങൾ സൃഷ്ടിക്കുന്ന അഭ്യസ്യങ്ങളിലെ സമാപ്തിയില്‍, വിദ്യാലെയിലെ അഭ്യസ്യത്തിന് അതിന്റെ വിജ്ഞാനഭൂതിക്കുന്ന വിദ്യാലെയിലെ അഭ്യസ്യങ്ങളിലെ സമാപ്തിയില്‍ ഭരണം നൽകുന്നു.

• പ്രായോഗികമായി പരിശീലനം നടത്തുന്നതിന് വിദ്യാലെയിലെ അഭ്യസ്യത്തിന് ഉപയോഗിക്കപ്പെട്ട പാഠാധ്യായങ്ങളുടെ അവതാരങ്ങൾ ഭരണം നൽകുന്നു.

• കാരണം വിജ്ഞാനഭൂതിക്കുന്ന വിദ്യാലെയിലെ അഭ്യസ്യത്തിന് ഉപയോഗിക്കപ്പെട്ട പാഠാധ്യായങ്ങളുടെ അവതാരങ്ങൾ ഭരണം നൽകുന്നു.
1. ഈ അബ്ദുൾഹിജേ ഓസ്മാനി മുൻ കിഴക്കും ആയിരുന്നു. ഇതിഹാസങ്ങളുടെ മുഖ്യപ്രധാനതാനായ ഓസ്മാനി വാസ്തവിക വാതിലിൽ വാസ്തവതാകാനുള്ള പ്രത്യക്ഷമായി കാണപ്പെട്ട നേർമാരിൽ മാറിയിരുന്നു. 

2. ഈ അബ്ദുൾഹിജേ ഓസ്മാനി മുൻ കിഴക്കും ആയിരുന്നു. ഇതിഹാസങ്ങൾ മുഖ്യപ്രധാനായ ഓസ്മാനി വാസ്തവിക വാതിലിൽ വാസ്തവതാകാനുള്ള പ്രത്യക്ഷമായി കാണപ്പെട്ട നേർമാരിൽ മാറിയിരുന്നു. 

3. ഈ അബ്ദുൾഹിജേ ഓസ്മാനി മുൻ കിഴക്കും ആയിരുന്നു. ഇതിഹാസങ്ങൾ മുഖ്യപ്രധാനായ ഓസ്മാനി വാസ്തവിക വാതിലിൽ വാസ്തവതാകാനുള്ള പ്രത്യക്ഷമായി കാണപ്പെട്ട നേർമാരിൽ മാറിയിരുന്നു.
...


<table>
<thead>
<tr>
<th>അപരിഭാഷിച്ച ചോദ്യം</th>
<th>എണ്ണം</th>
</tr>
</thead>
<tbody>
<tr>
<td>മാതൃക</td>
<td>6</td>
</tr>
<tr>
<td>എ.ഡി.</td>
<td>1</td>
</tr>
<tr>
<td>പരിപാലനം</td>
<td>7</td>
</tr>
<tr>
<td>(ഫലവിഭാഗത്തിന്റെ മാതൃക)</td>
<td></td>
</tr>
<tr>
<td>പ്രാഥമിക പരിപാലനം</td>
<td>2</td>
</tr>
<tr>
<td>പരിപാലനം</td>
<td>1</td>
</tr>
<tr>
<td>(ഫലവിഭാഗത്തിന്റെ മാതൃക)</td>
<td></td>
</tr>
<tr>
<td>പ്രാഥമിക ക്രമം</td>
<td>1</td>
</tr>
<tr>
<td>ഉയർന്ന ക്രമം</td>
<td>1</td>
</tr>
<tr>
<td>മദ്ധ്യ ക്രമം (മാ, പ്രാഥമികം, പരിപാലനം)</td>
<td>4</td>
</tr>
<tr>
<td>മാതൃക</td>
<td>2</td>
</tr>
<tr>
<td>പ്രാവശ്യം</td>
<td>2</td>
</tr>
<tr>
<td>മാതൃക</td>
<td>28</td>
</tr>
</tbody>
</table>
ഭൂമിശാസ്ത്രം

• ഭൂമിശാസ്ത്രത്തിന്റെ കാര്യത്തിൽ, വസ്തുക്കളുടെ തലസ്ഥാന, ഭൂമിയുടെ തലസ്ഥാന മുതലായ വിഷയങ്ങൾ തമ്മിലുള്ള ബന്ധം, ഉപരീക്ഷണപ്രക്രിയയുടെ തയ്യാറാക്കൽ, പണ്ഡിത്യകാലാവധി പലപ്പോഴും തത്ത്വജ്ഞവയ്ക്ക് തോത് സാമൂഹിക രീതിയുടെ മുഖാംശം ഉള്ളയും പിന്തുണക്കാനുള്ള പ്രവൃത്തിയുടെ സാമൂഹ്യാഭിപ്രായം പ്രേരിപ്പിക്കുന്നു.
• ഭൂമിശാസ്ത്രം ഉപരീക്ഷണപ്രക്രിയയുടെ ഒരു പ്രധാനഭൂമി ഉപകരണമാണ് ഭൂമിശാസ്ത്രം.
• ഭൂമിശാസ്ത്രം പാഠ്യാനുസൃതം ഉപകരണമാണ് ഭൂമിശാസ്ത്രം.
• ഭൂമിശാസ്ത്രം പാഠ്യാനുസൃതം ഉപകരണമാണ് ഭൂമിശാസ്ത്രം.
• ഭൂമിശാസ്ത്രം പാഠ്യാനുസൃതം ഉപകരണമാണ് ഭൂമിശാസ്ത്രം.

നാഷണൽ പേപ്പർ

• കലാവൈക്കം (200 മുതൽ 240 വരെ)

നവോദയ പേപ്പർ

ഭൂമിശാസ്ത്രം പേപ്പർ

• ഭൂമിശാസ്ത്രം പേപ്പർ

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• മൃഗശാസ്ത്രം

• ഉത്തരങ്ങൾ സ്റ്റാൻഡേർഡ് 60 വരെ
Veda Adhyayan
Code No.-345

औचित्यम्

भारतीयदर्शनस्य संस्कृतसाहित्यस्य प्रादेशिकभाषायसाहित्यस्य च समग्रं वाङ्मयम् वृक्षतुल्यम्। तस्य विस्तर: महान् अर्थः। बद्धमूलः: अर्थं वृक्षं। अतः: एव महान् वर्तते, सनातनः: वर्तते, चिराजीवी अर्थं वर्तते। प्रत्स्य वृक्षस्य मूलस्य अपरिवर्तनीयतः अर्थः। परन्तु नूतनं पल्लवम्: नूतनाति पुष्पाणि, नूतनाति फलाणि च नित्यं जायन्ते। किं तत् मूलम् इति स्वाभाविकी जिज्ञासा देशविदेशेणु जना: कुर्विन्ति। य: कोष्ठपितं तत्र प्रयत्नपरः भवति सः। सुमानं लभते एव। स: चिरायु: कृत्तार्थः भवति, कृत्तकृत्यः च भवति। किं तत् मूलम्। क: तस्य बोधा , का तस्य शाखा, कान्ति वा पुष्पाणि फलाणि च। का तस्य छाया। क: तस्य सौरं।। कतिपयः: ते सन्नित इति ईश्वरं वैचित्यम् अर्थं विश्वस्य विषयः।। परस्तु तस्य वृक्षस्य मूलं किम्। समग्रस्यापि अर्थं विश्वस्य तु उपप्रयासः। नैव सम्भवति। तथापि छाया: यदि इति: किसीपि जातु शकूनु: तहः अस्माकम् प्रयत्नः सफलः इति मन्यामहे।

भारतीयसमाजस्य मनोरोजः जीवनं दैनन्दिनतयावहारः धर्मचरणस्य आध्यात्मिकतः इति समग्रस्य मूलस्य गौरवस्याली वेदं: एव। भारतीयचिन्तनं वैदिकवाङ्गमयस्य वैशिष्ट्यं सुविदं समेतं वैदिकविद्वद्वत्त्यानाम। वैदिकवाङ्गमयस्य विभूतिः: वास्तविकी वर्तते। इदं वाङ्गमयं प्राचीनानं, समयपृथिवित्त्यापि , अर्थं परिकालिणिविशालम् , अर्थं वैभवं निरतिश्यम् , अर्थं सौन्दर्यगुणं: अनन्यतुल्यं। महत् मौलिकं पुरातनं च इदं वाङ्गमयं। अत एव तत्र अर्थाकम् अभिनिवेशः: प्रृवत्तिः: जिज्ञासा श्रद्धा च वर्तते। न केवलम् एतावतान्तम्। अन्यायानि अर्थं निर्निवेशं वैदिकवाङ्गमयस्य अध्ययनं विद्याधारिनः कृतं विशिष्टम् अभिमुखं जन्यन्ति। वैदिकवाङ्गमयस्य अध्ययनं जानते अर्थात् नैव धर्मसम्प्रदाय:ं मन्त्रानि आचारः: च प्रवर्तनं येणां प्रतिपाद्यं दुष्टं शास्त्रविरूढं न वर्तते। समाजः: धर्मविषयं अत्यन्तस्य अभ्यश्यात्तुः: भवति। अन्यायानि विद्याधारिनार्थानि वैदिकवाङ्गमयानं नित्यान्तम्: आवश्यकम्। विज्ञानसाध्यायन्तम् उद्दृश्यायि। जीवनयात्रानिवाहयाः। परस्तु जीवः: कृतं: आयाति, कृतं गच्छति, तस्य सुखदः:खादीयाः कारणानि कानि। इह लोकं: परलोकं: अस्ति वा न वा। पुनर्जन्म अस्ति वा न वा। यद्य स्थातु ततः मन्त्यं किंस्य परत्वं न वा इति अर्थं सामग्री: विज्ञानाधीनः। अर्थं तु धर्मस्मीं।। तत्स्यैव समग्रस्य धर्मस्य मूर्तं वेदः। अत: जीविकार्थम् विज्ञानम् सुखदः:खनिःश्रीयाः इन्हरलोकवात्रायैं च वेदः इति सुषुप्ती विभागः: भवति। अत: वेदाध्यायनं सर्वप्रथं सुलग्नां कर्त्तव्यमेव।

अधिकारी

अर्थं पाठविषयं: सम्पूर्णपूर्णं संस्कृतभाषया लिखितं: अर्थः। परीक्षा अर्थं संस्कृतमाध्यमेन एव भविष्यति। अत: अर्थं पाठ्यस्य क: अधिकारी इति नूतनं समुददति प्रशः।

अन्त स: छात्रः: अधिकृतः: य: -
प्रयोजनम् (सामान्यम्)

उच्चमाध्यमिकस्त्रेषेद्वाध्ययनस्य पाठ्यत्वन्योजनस्य कालिन्य उद्देश्यनि अन्तःधो दीयन्ते।

• भारतीयजीवनस्य सर्वस्वम् वेदः। तत्स्य जाृं भवतु।
• वेदात्म निर्विदात् दर्शनानाम् वैज्ञानिकतत्त्वां कला विश्वार्थाचार्यानां च जाृं भवतु।
• वेदाध्ययनेन पुरुषवान् भवतु। परोपकारी भवति जनः। अतः वेदाध्ययनं कथं कार्यव्य।
• वेदविद्वृत्तावि नासिककदर्शानि अपूर्णानि सन्निः। तेन पूर्णानि वेदम् अधीत्य प्रयत्तेत छात्रः।
• वेदजाससौ जिज्ञासाप्राप्तनाय अध्येता सम्क्षेत्थ भवतु।
• संस्कृतज्ञ संस्कृतेश्वकृत्य संस्कृते अध्ययनस्य सम्बन्धः: प्रमाणात्: भवतु छात्रः।
• अति प्राचीनाया भारतीयज्ञानसम्पदायु वैज्ञानिकाः सर्वज्ञानोपकारिः महिमानं च सगर्व जगति प्रसार्येत्
• वेदजानात्म स्वर्गेन भविष्यति येन वेदस्य सर्वानं अंशानं पठितवा छात्रः: तेषां अंशानाम् अथाय जास्यनिः।
• तेन वेदजानात्म स्वर्गेन भविष्यति येन वेदस्य सर्वानं अंशानं पठितवा छात्रः: तेषां अंशानाम् अथाय जास्यनिः।
• वेदाध्ययनं क्रृत्य छात्रः: महाविद्यालयस्त्रेषे विश्वविद्यालयस्त्रेषो च प्रवर्तान्नाश्च महाविद्यालयाः

प्रयोजनम् (विशिष्टम्)

वेदाध्ययनेन प्रवेशस्य सामाध्यम्

• समध्यस्य वेदवाहिनयस्य प्रापुः जात्वा तत्त्वदेशानं पठितं शक्तन्यात।

वैदिकसूक्तानाम् अध्ययने सम्बन्धः भवेदध्येता।

• इन्म विषयं पठितवा वेदेषु प्रवेशं कर्यात्।
• वेदानां गौरिवं जानीयताः।
• पठितसाम्यवम् आभिविद्यानं प्रश्नानाम् उत्तराणि दायस्यनिः।

सूक्तविवाहयाम् सामाध्यम्

• वैदिकभाषायाः: जानं लक्ष्यं अन्येषां सूक्तानाम् व्याख्याने अध्ययने च प्रवर्ततं छात्रः।
• वैदिकत्वाकरणस्य जानेन वैदिकभाषायाः: भीतिं जानात्यत। तत्त्वसूक्ताः व्याख्याने सम्बन्धं भविष्यति।
• सूक्तानं लात्मयं जास्यनिः। तेन वैदिकचिन्त्याः: व्याख्याने सम्बन्धं भविष्यति।
पाठ्यक्रमिक सामान्यता की मापदंड

• सूक्तप्रयोगस्थता

पाठ्यसमागमी

पाठ्यक्रमिक सामान्यता की मापदंड

• सूक्तप्रयोगस्थता

पाठ्यक्रमिक सामान्यता की मापदंड

• सूक्तप्रयोगस्थता

पाठ्यक्रमिक सामान्यता की मापदंड

• सूक्तप्रयोगस्थता
अध्ययनयोजना

• निदेशभाषा (Medium of instruction) - संस्कृतम्।
• स्वाध्याय कालावधि: (Self-study hours) २४० होराः
• न्यूनत: त्रिशत् (३०) सम्पत्ति-क्षेत्र: (Personal Contact Programme - PCP) अध्ययनकेल्देयुः अविष्णुः।
• भारावं: - सैद्धांतिकः (Theory) शत्तब्रित्तिम्। प्रायोगिकः (Practical) - नस्ति।

उत्तरिष्ठा-मानदंड: सैद्धांतिकस्य ३३%।

आयुः १५ वर्षम्।
निदेशभाषा: संस्कृतम्।
विषयावधि: २४० होरा
अड्कविभाजनम्
अंगेस सारण्यां द्रष्टव्यम्।

पाठ्यविषयस्य उद्देशः (पाठ्यविषयबिन्दवः)

उच्चतरमाध्यमिकक्षेत्राया वेदाध्ययनस्य पुरस्तं निम्नविषयं: अन्ततभेदलिः।
विवरणमधास्तादुपनिघ्नयते।-

समयस्य पाठ्यविषयस्य प्रयोगं भागः: प्रकल्पिताः: सन्निः। प्रतिभागम् कल्ति पाठा:ः, स्वाध्यायकृति होराःः,
सैद्धांतिकस्यपरीक्षायाम् कियान् अंशः; प्रायोगिकपरीक्षायाम् कियान् अंशः; प्रत्यध्ययम् अड्कविभाजनं चेति विषयः
अत्र प्रदीयन्ते।

अध्ययः - १ वैदिकसाहित्येतिहासः (पाठा: १-६)

अध्ययनस्य औषिथित्यम्

यथा मूर्ति विना वृक्षः न चिन्ततिसि शक्यते तद्वद् वृदं विना भारतीयवाङ्मयं वृदं विना चिन्ततिसि न शक्यते। अतः मूलभूतस्य वेदस्य अध्ययने प्रवृत्ते: पूवे वेदस्य सम्यक परिचयः नितराम आवश्यकः।

अस्मिन् विभागे वैदिकवाङ्मयस्य वैलक्षण्ण्यं प्रकटयते। वेदस्य संहितासाहित्यम्, ब्राह्मणसाहित्यम्
वेदाङ्गसाहित्यम् इति विषयः अत्र अन्ततभेदलिः। वेदस्य आरण्यकम् उपनिषद् चेति भागद्वयम्। तद्विषये
पर्याप्तम् आलोचनम् अत्र विधास्यते।
अध्याय: - २ वैदिकस्वरप्रक्रिया (पाठ: ८-९६)

अध्यायस्य आचित्यम्

व्याकरणज्ञां विना वेदानाम् अर्थं: स्पष्टं नावगम्यते। अतः अस्मिन् विभागो पाणिनियव्याकरणस्य वैदिकभागं: उपस्थाप्यते। विशेषतः स्वरभेदेन अर्थभेदो भवति। अतः: स्वरजः एवं वेदं बोधुम् शक्नोति। अस्मिन् विभागो वैदिकस्वरः इत्येव प्रमुखविषयं: वर्तते। तत्रापि कानिचन मुख्यानि चितानि सूत्राणि दीयन्ते। अत्र सूत्रव्याख्यानं कथं भवति, तेन वैदिकस्वरः कथं सन्नितति इति विषयं: प्रामुख्येन उपल्यस्यन्ते।

अध्याय: - ३ वैदिकसूक्ताध्ययनम् (पाठ: ९७-२८)

अध्यायस्य आचित्यम्

वैदिकसूक्तानि भारतीयज्ञानस्य उत्सस्वरूपाणि। अत्र चितानां सूक्तानाम् अध्ययनाय सामग्री वर्तते। सूक्ताध्ययनं कथं भवति, के के विषयं: वेदाध्ययनकाले अवधेयाः: सन्नितं, सूक्तानां व्याकरणं किंचित्ति, सूक्तस्य तातपयं किंचित्ति इति एते विषयं: अत्र प्रदीयन्ते। कानिचन संवादसूक्तानि अपि अत्र सन्नितं इत्यपि अत्र अपरो विशेषः।
पाठ्यविषयस्य उद्देशः (पाठ्यविषयविन्दवः)
उच्चतरमाध्यमिककक्षाया: वेदाध्ययनस्य पुस्तके निम्नविषयः अन्तःब्रह्मत

<table>
<thead>
<tr>
<th>क्र.सं.</th>
<th>अध्याय:-</th>
<th>मुख्यविन्दवः</th>
<th>स्थायायाय होरा:</th>
<th>भारांशः (अड़का:)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>अध्याय:- 1</td>
<td>वैदिकसाहित्यतिहास:-</td>
<td>५०</td>
<td>२४</td>
</tr>
<tr>
<td>पाठ:- 1</td>
<td>वैदिकसाहित्यतिहास:- वैदिकवाङ्मयस्य वैलक्षण्यः, वैदिकप्राण्यविमार्शः</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:- 2</td>
<td>वैदिकसाहित्यतिहास:- संहितासाहित्यम् (ऋग्वेदस्य)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:- 3</td>
<td>वैदिकसाहित्यतिहास:- संहितासाहित्यम् (सामवेदस्य यजुवेदस्य)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:- 4</td>
<td>वैदिकसाहित्यतिहास:- संहितासाहित्यम् अथवावेदस्य। ब्राह्मणसाहित्यम्।</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:- 5</td>
<td>वैदिकसाहित्यतिहास:- ब्राह्मणसाहित्यम् - ब्राह्मणग्रन्थानां महत्त्वम्, ब्राह्मणकालिको धर्मः, समाजशैलित, चातुर्विवण्यम्, विविधानि ब्राह्मणालि</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:- 6</td>
<td>वैदिकसाहित्यतिहास:- आरण्यकम्, अस्य सामान्यपरिचयः, ऐतरेयारण्यकम्, शाङ्करायारण्यकम् बृहदारण्यकम्, तैत्तिरीयारण्यकम्। उपनिषदं सामान्यपरिचयः</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>अध्याय:- 2</td>
<td>वेदाङ्गसाहित्यम्</td>
<td>९०</td>
<td>३६</td>
</tr>
<tr>
<td>पाठ:- 7</td>
<td>वेदाङ्गसाहित्यम् वेदिकस्वरक्रियः</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:- 8</td>
<td>वेदिकस्वरक्रियः साधारणस्वरप्रकरणम् - १ (सिद्धान्तकामुदीतः चित्तानि सूत्राणि)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:- 9</td>
<td>वेदिकस्वरक्रियः साधारणस्वरप्रकरणम् - २ (सिद्धान्तकामुदीतः चित्तानि सूत्राणि)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>अध्याय:- 3</td>
<td>वैदिकस्वरशेषः</td>
<td>१००</td>
<td>४०</td>
</tr>
<tr>
<td>पाठ:- 10</td>
<td>वैदिकस्वरशेषः धातुस्वरः, प्रातिपदिक्स्वरः च</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:- 11</td>
<td>वैदिकस्वरशेषः फैट्स्वरः</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:- 12</td>
<td>वैदिकस्वरशेषः प्रत्ययस्वरः</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:- 13</td>
<td>वैदिकस्वरशेषः समासस्वरः</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:- 14</td>
<td>वैदिकस्वरशेषः तिड्स्वरः</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>अध्याय:- 3</td>
<td>वैदिकसूक्ताध्ययनम्-</td>
<td>२४</td>
<td>३६</td>
</tr>
</tbody>
</table>

241
| पाठ: - १५ | वैदिकसूक्ताद्यायनम्: अभिनसूक्तम् (ऋ.वे.०.१) |
| पाठ: - १६ | वैदिकसूक्ताद्यायनम्: इन्द्रसूक्तम् (ऋ.वे.२.६) |
| पाठ: - १७ | वैदिकसूक्ताद्यायनम्: हिरण्यगर्भसूक्तम् (ऋ.वे.००.१२१) |
| पाठ: - १८ | वैदिकसूक्ताद्यायनम्: पुष्पसूक्तम् (ऋ.वे.००.४०) |
| पाठ: - १९ | वैदिकसूक्ताद्यायनम्: देवीसूक्तम् (ऋ.वे.००.१२५), श्रद्धासूक्तम् (ऋ.वे.००.१५१) |
| पाठ: - २० | वैदिकसूक्ताद्यायनम्: विष्णुसूक्तम् (ऋ.वे.००.१५४), मित्रावरणसूक्तम् (ऋ.वे.५.८२) |
| पाठ: - २१ | वैदिकसूक्ताद्यायनम्: अक्षोसूक्तम् (ऋ.वे.००.३४) |
| पाठ: - २२ | वैदिकसूक्ताद्यायनम्: पर्जन्यसूक्तम् (ऋ.वे.५.८३), मनुमत्स्यकथा (शु.यजु. मा.श्र. १.८.१) |
| पाठ: - २३ | वैदिकसूक्ताद्यायनम्: शिवसंज्ञकल्पसूक्तम् (यजु.वे. अध्याय ३४, मन्न १६), प्रजापति (शु.यजु. अध्याय ३२, मन्न १७) |
| पाठ: - २४ | वैदिकसूक्ताद्यायनम्: सुद्राद्यायः (शु.यजु. वे. १५.१६) |
| पाठ: - २५ | वैदिकसूक्ताद्यायनम्: पृथ्वीसूक्तम् (अ.वे.१२.१) |
| पाठ: - २६ | वैदिकसूक्ताद्यायनम्: सरमापणिसंवादसूक्तम् (ऋ.वे.९.८०) |
Sanskrit Vyakarana
Code No.-346

औचित्यम्

भावविनिमयमाध्यमम् हि भाषा। भाषायः उच्चत: समाजस्य उच्चतं द्योतयति। समाजः उच्चतान् विविधान्म् भावन क्रित्यतिम् भाषाम् व्यवहरति। यदि भाषा चूर्ता स्थायतः तर्किन्छ भावनकस्मिन् कालिन्तं भवति एव।

वितरितं भाषातः प्रकटीयव्याख्यातः कालिन्तं कृतिन्तं। भाषाम् उपयोगिनि विद्धति। क्रमशः भाषायः परिवर्तनस्य निर्देशः जापन्ते। ईशानाः भाषान्तरस्य संकलनव्ययत्वामिति। प्रतिदेशः भाषा भिन्नः।

प्रतीरोजः भाषा भिन्नः। अतः वचनेन सहायता॒े प्रारम्भः दुष्करः। एकभाषासु विद्युक्तस्य उत्तममात्र वात्रमात्र अन्यायाभिषिका विविधता भविति। अर्थं महान् अन्तरायः वर्तते। अतः तथा काचित् महीयतां संप्रदायः च भाषा गायत्रव, संकलभाषाः। यस्ता: सन्ततितः रुपाः। संस्कृतमेव सा भाषा। सा एव भाषास्मातवानम् एकमेव समाधानम्।

संस्कृतभाषाय: सुहृद्व्यकारणमिति। नवीनश्वदनिमन्त्रणसामथीयपिं अतिः। दशसहसर्षपूर्वांश गृह्यम् व्यायम् अद्यापि परितः ब्रूतं शक्तुम्। यदि वयं संस्कृतेः जानिः। अद्य अस्माय: निमित्वावत्स्य सहस्रवर्षवतस्मायि जना: परितः शक्त्विन्ति। यदि वयं संस्कृतेः लेखनं कुम्। अतः: विश्वसिन्न: विश्वस्य संस्कृतमेव सर्वभृत्याः भाषा। संस्कृतशिक्षाय: संस्कृतशिष्यानामूँ उद्धारणमात्राः जाति: गौरवन्नित्तिकशिविन्तिः च भविति। भारते: य: संस्कृतं जानिः तं विद्युक्तव्य न कोष: वयं शक्तिः। धर्मस्य धर्मस्य धर्मस्य दशसहस्राः च अर्थः भाषाय: नवीनश्वदनिमन्त्रणम्। यो भाषा: जानिः तस्य पूर्ण: जानाभाष्यार उद्धारिति: तत्त्वतः। न केवलमेवप्राप्तव्यायम् स्वामी विवकानन्दः उवकचिः - 'निम्नजातियान् वदामि - गृह्यम् अवस्थाय: उन्नतिसाधनस्य एकमाण्ड: संस्कृतभाषाशिक्षणम्।' सर्वात:- जातितेजस्य नाशोपन्यासाः संस्कृताध्यायनेन भवते। अतः: न केवलम् उद्धारणात्मानम् कृते अपि तु सर्वश्रीं कृतं संस्कृतम् अन्यांतरम् उपकारकम् अस्ति।

जगन्ति प्रायः। सर्वव: भाषा: संस्कृतभाषात: एव समुद्रेतः। सर्वसमपि मूलम् इत्यं भाषा। भारतस्य प्राचीनतिहासस्य अध्ययनमपि दैशिका दैशिकाः च विद्वान् च: चित्कर्षिति। परस्तु संस्कृतभाषाजानेन विना पड़िता ते भविति।

भाषा जानिः ध्वनिस्माताः राज्यनिःसारात: तत्र अभवत्वत्। दैशिका: विज्ञानस्य कारणं प्राचीनिकताः। परस्तु संस्कृतम् राष्ट्रेत्वकस्य कारणस्तिः। ब्रूतिः जानेन हिंदूमाः च मूलयन्तः। नैके दाशंशिकायन्तः: काचित् अस्यामे भाषाय: सन्ति। अतः: इत्यं केवलं कस्यतिः कर्तव्यस्य कर्तव्यस्य धर्मस्य भाषा इति वयं मुख्यज्ञानम्।

काणाः पाणिनीयं च सर्वास्त्रशैवार्थस्य इति प्राचीनिकतः। अर्थात् आन्विकिकी विद्याः (न्यायशास्त्रम्), पाणिनीयं व्याकरणम् अत्याश्च सर्वप्राणमि शास्त्राणाम् उपकारकस्तिः। अतः संस्कृते यें कामपि शक्यं रिपरितः: न्यायं व्याकरणं च नूतं पठितः। अत: संस्कृतिज्ञासुनामाः कृते व्याकरणस्य आत्मनित्तिकीम् उपयोगिताम् अभिलक्ष्य इदम् व्याकरणम् पठ्यविषयवेचने निधिर्निर्मिति।

महर्षि: वत्त्वलिः: अभयुपगच्छिति यतृं संस्कृतव्याकरणांजापूर्वकम् यद्य संस्कृतभाषाप्रयोग: क्रियते तर्कं प्रयोगकर्त्ता पुण्यं लभते। अथात्: व्याकरणाध्यायनस्य लाभोःस्ति। अथात्: व्याकरणम् अध्येयम्।
भाषय भावविनिमयकाले कविचिपु जुटे: भवति चेतृ विचनः अपि भवितमहीत। शत्रेण मित्राणि भवितमहीतः, मित्राणि शत्रौ भवितमहिन्ति। अतः भाषयाः अनन्यसाधारां गृह्यवस्थितेन एव। तथाहि सुभाषितम्।

यद्यपि बुधनाधिष्ठे तथापि पठ पुनः व्याकरणाम्।

स्वजनः श्वजनो माहृत् सञ्चल शकलं सक्तर्क शक्तिः।

अथात् - (हे) पुनः, यद्यपि (त्वम्) बुध न अधीष्ठे (पढ़िसि), तथापि व्याकरणाम् पठ। (व्याकरणाज्ञानकारणात्) स्वजनः (आत्मीयः) श्वजनो (कुकुरः) मा भृत्तु, सञ्चलं (समयम्) शकलं (खण्डम्) मा भृत्, सक्तर्क (एवतर्कम्) शक्तिः (विष्ठा/मल:) मा भृत्। अथापि अध्ययनं व्याकरणम्।

अधिकारी

अयं पाठ्यविषयं: सम्पूर्णपर्यन्त संस्कृतभाषयां लिखितः अस्ति। परीक्षा अपि संस्कृतमाध्यमेन एव भविष्यति। अतः अर्थां पाठ्यस्त कः अधिकारी इति नूतनः समुदेति प्रश्नः।

अत्र स छात्रः अधिकृतः यः -

अधित्तकवियोक्षोः अनधीत्तव्याकरणशास्त्रः।

सरसंस्कृतं, संस्कृतमाहित्यास्त्रं सरलगद्याः शाश्वास्त्रम् च पाठ्यम् बोधुं च शक्तिः।

सरसंस्कृतं बोधुं शक्तिः।

स्वभावं संस्कृतभाषया लिखितम् प्रकटितं तुं शक्तिः।

संस्कृतव्याकरणं जिज्ञासुरस्तिः।

प्रयोजनम् (सामान्यम्)

उद्भवाध्यमिकस्तरे वाणिज्याव्याकरणस्य पाठ्यवेदने योजनस्य कालिचन उद्देशानां अत्राथें दीर्घतः।

न्यायशास्त्रं व्याकरणशास्त्रं च सर्वशास्त्राणाम् अध्ययने अति उपकारकम् अस्ति। अतः व्याकरणा चात्मस्य भवतु इति लक्ष्यम्।

जगति सुप्रसिद्धम् पाणिनीव्याकरणस्य केतात्तिष्ठत् प्रकरणानां सामान्यं दशमक्कायां जानं जातम्।

अवशिष्टभागस्य जानं चत्रस्य भवतु। कक्षाद्वित्यायापि अयं विषयः।

संस्कृतव्याकरणां ज्ञानेन सर्वस्य चात्मस्य अध्ययनं निजास्थापनायात् सम्बन्धेत स्वप्नम्।

संस्कृतभाषाज्ञानसूत्रानि ज्ञानार्थस्य अध्ययनं सामान्यस्य भवतु।

संस्कृतव्याकरणानां च रक्षणायात् व्याकरणाः सामान्यस्य रक्षणस्य सम्बन्धेत।

अति प्राचीनाय भारतीय सर्वस्य भविष्यति येव संस्कृतस्य सरलस्य अस्पनां पत्थर्या तथात् तेश्च्युः

अंशानां अर्थभावाणी स्वप्नम्। ते स्वतं मोक्षिकां लिखितां च अभिभूतिकं करतुः शक्त्यन्ति।

संस्कृतव्याकरणं पत्थर्या चात्म: महाविद्यायस्तरे विशविद्यायस्तरे च प्रवर्तमाणेषु पाठ्यक्रमेषु अध्ययनार्थम् अवसंग्रं प्राप्तं सम्बन्धम् भविष्यति।
भाषाशास्त्रविद्वान् शक्ता: भविष्यति।

प्रयोजनम् (विशिष्टम्)

व्याकरणे प्रवेशस्य सामाध्यम्

महर्षि: पाणिने: अप्राणधार्यी इति सुविश्वासस्य ग्रन्थस्य अध्ययने समर्थ्यान् भवेदत्वेता।

व्याकरणं द्वादशस्य: वर्णं पठयते। सविशालो विस्तरस्य विद्यते। दशमकक्षायां व्याकरणं पठित्वा व्याकरणे प्रविश्योऽस्मिन् विषयं पठित्वा व्याकरणं समग्रं व्यापितम् सामान्यम् जानियते।

व्याकरणाध्ययं सोपणक्रमे स्वत:। प्रथमिकानि सोपणानि दशकाल्यायाम् अतिक्रान्तानि। तथापि यावत् अर्थशीष्य: पाठ्यविषय: न पठित्यते ताब्द: अन्यात् व्याकरणं न पठित्वं शक्यते। अतः अनिवार्यं विषयं।

सूत्राणि चन्द्रां कथं कृतां इति रूपमें जानां भवेत।

पठितसामाग्रीम् आश्रितानि प्रश्नानाम् उत्तराणि दातं पारस्ये।

सूतव्याख्याने सामाध्यम्

समासस्य विविधाति सूत्राणि जानियताः।

बहुतो व्याकरणस्य पारिभाषिकशब्दां् जानियताः।

अधिकारः अनुवृत्ति: पदयोजना च कथं भवति इति जास्यति

सूतर्याणि अन्ते अन्त्ये जूत्राणां उपयोगितां अवगच्छते।

सूत्रपदानि परस्परम् अन्वेषयं करुः प्रभवेत्।

सूतव्याख्याने समर्थे भवेत्।

सूत्रप्रयोगस्य सामाध्यम्

सूत्रं लक्षणं कथ्यते। सूत्रं यस्य संस्कारं करोति ततः लक्ष्यं कथ्यते। किं सूत्रं कस्य लक्ष्यस्य संस्कारं करोति इति जाताचार्योऽः लक्ष्यसंस्कारं करुः शक्यति।

लक्ष्यसंस्कारात्मके सूत्राणि परस्परविरोधं परिभाषाः समर्थं भविष्यति।

समग्रं साधुस्यम् साधुवाचव्यायां तथा सूत्रप्रयोगाणि संस्कृतद्यावि८ समर्थं भविष्यति।

साधुश्वद्यप्रयोगस्य सामाध्यम्

सूत्राणि व्यवहारस्य साधुश्वाद्य निष्पादिकां तिः संस्कृतं व्यवहर्तूः योग्य: भविष्यति।

स्वयं संस्कृतवाचविवाहप्रयोगाणि स्वभाषिकारेन जात्वा व्याकरणसाहित्ययाम् दौषणां दूरीकृत्य शुद्धवाचारप्रयोगाणि समर्थं भविष्यति।

अन्यप्रयुक्तायाः दुष्टाशायाः अपि संस्थोधने समर्थं भविष्यति।

पाठ्यसामग्री

पाठ्यक्रमेण सह निम्नलिखितसामग्री समायोजिता भविष्यति-

त्रीणि मृदितानि पुस्तकानि।
एक शिक्षकाक्षित-मूल्यांकनप्रणाली प्रदायित। अनेक सह छात्रों: एक परियोजनाकार्यमूल्यकरण करणीयम्।
व्याकरणप्रणाली सत्यांकन प्रायोगिकरूप मूल्यांकन अर्थ भविष्यवात्स्य। परन्तु प्रायोगिकक्षेत्र नासित।
पाठनिर्देश संपर्ककेंद्रों एवं अध्ययनकेंद्रों में सत्यांकन स्वतः: विकास: भविष्यवात्स्य। अनेक तेश्व स्वतः: युक्तिमूल्यतिचिन्तनशिक्षा विकास: भविष्यवात्स्य।
मुक्तविद्यालयों में प्रवेशस्तर पाठ्यक्रममिम विद्यार्थी एकवर्ष: अधिकाधिक यथावर्ष यथातुल्ल प्रकाशित शक्तिः।

अड्डक्मूल्यांकनप्रविधि: परिक्षायोजना च
प्रत्येक (१००) शतम् अड़का: सन्नित। परीक्षाक्षेत्र: होरात्रान्तरम्। अस्थ प्रत्येक सिद्धिकर्मस्थः (Theory)। प्रायोगिकरूप (Practical) किमपि नासित। क्रमिकम् (Formative) समस्तिक (Summative) चेति दियत् मूल्यांकन भविष्यवात्स्य।

क्रिमिक कृति मूल्यांकनम् - विशेष: अड़कानां (२०) शिक्षकाक्षितक साधन (TMA) एकमेव पत्र स्वातः। अस्थ मूल्यांकन अध्ययनकेन्द्र (Study Centre) भवेत। अस्थ कार्यस्थः अड़का: अड्डक्प्रत्यक्षाओऽ (Marks sheet) प्राप्तक उल्लिखितः स्थुः।

समक्षिणात् मूल्यांकनम् - वर्ष वार्षिकम् (मार्गमात्र अक्टूबरमास्री च) बाह्यपरीक्षा भविष्यवात्स्य। तत्र परीक्षायोजना समुचित यथावर्ष मूल्यांकन भविष्यवात्स्य।
प्रशिक्षण ज्ञानम् (Knowledge), अवगमम् (Understanding) अभिव्यक्तिः (Application skill) चालकः स्युतानुपातेन प्रशनः: समाविष्टः: स्थुः। परीक्षास्तु अतिलघुत्तरायत्रीऽहः लघुत्तरायत्रीऽतिनिर्भावायत्रीऽप्रशनामयीऽपि समावेशः: भविष्यवात्स्य।

नूतनत: सूत्रविद्या रूपसाधनम् इति च दो मुहः: विषयः: स्थुः। अन्ये प्रसंक्तानुपातत: केवल विषयः: अपि स्युरितः अवधेयम्।
उत्तरीणायम् पणः (condition) - प्रतिशतां श्रवस्तिश्रद्धा (३३%) अड़कः: उत्तरीणायम् पणः (मानदण्डः) वर्तते।
संस्थानस्वरुप परीक्षायोजनात् उत्तरलेखनमाहा व संस्कृतम् (अनिवार्यम्)

अध्ययनयोजना

निर्देशबाधा (Medium of instruction) - संस्कृतम्।
व्याख्यायाय कार्यावधि: (Self-study hours) २४० होरः।
न्यूनत: त्रिषत (३०) सम्पर्कक्षेत्र: (Personal Contact Programme - PCP) अध्ययनकेन्द्रेऽध्ययनकेन्द्रे मूल्यांकित।
भारांश: - सौदामिनीकार्यक्रम (Theory) शतं प्रतिशतात्म।
प्रायोगिकम् (Practical) - नासित।
उत्तीर्णता-मानदंड: सैद्धांतिकस्य 33%

आयु: १५ वर्षम्

निर्देशभाषा: संस्कृतम्

विषयावधि: २४० होरा

अड़कविभाजनम्

अग्रे सारण्यां दृष्टव्यम्

पाठ्यविषयवस्तु उद्देशः (पाठ्यविषयविन्दवः)

उच्चतरमाध्यमिककक्षाया व्याकरणस्य पुस्तकेः निम्नविषयः।
विवरणमधस्तादुपन्यास्याते।

समासस्य पाठ्यविषयस्य त्रयो भागः प्रकल्पितः: सन्निः। प्रतिभागम् कर्ति पाठाः। स्वाध्यायाय कर्ति होराः।
सैद्धांतिकपरिशिष्टायाम् कियान् अंशः। प्रायोगिकपरिशिष्टायाम् कियान् अंशः। प्रत्यध्यायम् अड़कविभाजनं चर्ति विषयः।
अत्र प्रदीयन्ते।

अध्यायः - १ समासः स्त्रीप्रत्ययः। च (पाठा: १-११)

अध्यायस्य आविष्करणम्

यथा प्रकृतिप्रत्ययमेलेनेन शब्दः निश्चयते तथा दृश्योऽध्योऽध्य:। मेलेनेन समासः। निश्चयते। समासः
कर्तियः वेदः किं पदं भूतं किं वा परम् इति विवेकः। अपेक्षायते। तत्थिच साधुशब्दनिमित्तास्य समासस्य कार्यं स्वकीयः
प्रक्रिया असित सा अत्र समूहम् उपन्यास्याते। समासस्य जानं विना समासस्य अर्थं: स्पष्टं न भवति।
अतः संस्कृतस्य नूतन समासः। अध्यायः। अतः साविस्तरम् अन्तर विभागे प्रपन्यो विवायाते।

संस्कृताभाषायां स्त्रीलिङ्गशब्दः: शब्दः। सन्निः। तत्र लिङ्गं शब्दस्य अर्थस्य वा इति विचारः। प्रस्तूत्याते।
विभिन्नानां शब्दाणां स्त्रीप्रत्यये गौणविविधं रूपं भवति: इति ससूत्रमतः पदर्थ्याते। अर्थं प्रकरणस्य जानेन
स्त्रीलिङ्गशब्दाणां निमित्तान्तिकप्रक्रिया स्पष्टीकरणस्य।

अध्यायः - २ तिड़कितप्रकरणम् (पाठा: १२-२३)

अध्यायस्य आविष्करणम्

साधुशब्दनिमित्तास्य व्यवहारश्च व्याकरणस्य मुख्यं लक्ष्यम्। सुक्रन्तितिड़कितः वैदेशिकम् रद्वविविधम्। तिड़किती
परस्परस्तरपूवदन्तयोऽध्येदिन पद्धतिविधिः। धातवं विवकरकमेदिन दशस्वर्णे विहक्ताः। अतः अरमिन्तर विभागे धृताः।
तिड़कप्रथ्ययोऽगे पदसाधारणस्य प्रक्रिया सुक्रन्तितः विधानपर्थसंर पदर्थ्याते। तत्र श्वादिकप्रकरणम् अति मुख्यम्।
तत्रजानेन अनुपेक्षापि जानं झुङ्गति भवितमृहति तत्प्रकरणस्य साधुशब्दनिमित्तान्तिकप्रक्रिया अत्म प्रमुखः विषयः। कथे क्रियापदं सृजःते संस्कृतं इति रमणीयाः। विषयोऽत्रः।
अध्याय: - 3 ग्रीजन्तादिकं तद्वितप्रत्यया: च (पाठ: २४-३१)

अध्यायस्य औचित्यम्

तित्रन्तप्रकरणस्यैव अंशभूतोऽयं विभागः। अतः वैशिष्ट्यं हि प्रयोजकधातुनिर्माणम्
िृष्टिकर्मनन्तः तद्वितप्रत्ययम्। ततश्च विशिष्टार्थद्योतनाय उपसंगमः योगाय धातः। परं कदाचित् परस्परमपः
भवति कदाचित् आत्मनेपदं भवति। अस्मिन् प्रकरणं संपूर्णम् भागः वदते। कल्लिर प्रयोगः कमीणि प्रयोगः भावे
प्रयोगः इति विविधः प्रयोगोऽवश्च संस्कृतः। तथा प्रयोगः कर्त्तव्यः चेत् धातः। रूपं कथं साधनीयमपि ससूत्वमिह
उपादीयते।

सुबन्तपदस्य प्रकृतिपुरं अन्त्यमम् भवति तद्वितर्तनश्रवं। स च प्रातिपदिकाः तद्वितप्रत्यया: योगेः
निप्पदयते। विविधः तद्वितप्रत्ययः। अतः विभागः तुज्ज्ञानाय अर्थं विभागः साहाय्यं करोति। प्रातिपदिकाः
तद्वितप्रत्ययः कथं भवतीति ससूत्वमं उपन्यासं। अतः निन्निति तद्विततनश्रवं: सुबन्तप्रकरण: व्यवहियते।

पाठ्यविषयस्य उदेशः (पाठ्यविषयविन्दवः)

<table>
<thead>
<tr>
<th>क्र.सं.</th>
<th>मुद्रीविन्दवः</th>
<th>समासः स्त्रीप्रत्ययः: च</th>
<th>स्वाध्यायः होरा:</th>
<th>भारांश: (अड़कः)</th>
</tr>
</thead>
<tbody>
<tr>
<td>१</td>
<td>पाठ: - १</td>
<td>केवलसमासः: अद्वीयभावसमासः: च</td>
<td>४८</td>
<td>३६</td>
</tr>
<tr>
<td></td>
<td>पाठ: - २</td>
<td>लत्पुरुषसमासः - दुवितार्यदित्पुरुषसमासः:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>पाठ: - ३</td>
<td>लत्पुरुषसमासः - तद्वितार्यदित्पुरुषसमासः:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>पाठ: - ४</td>
<td>लत्पुरुषसमासः - कुगतिप्रदितसमासः, उपपदसमासः: च</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>पाठ: - ५</td>
<td>बुहुव्रीहिसमासः - व्यधिकरणबुहुव्रीहि: समान्तप्रत्ययः: च</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>पाठ: - ६</td>
<td>बुहुव्रीहिसमासः - समसांतप्रत्ययः: निपात्यवस्थादिकम्</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>पाठ: - ७</td>
<td>द्वन्द्वसमासः: पूवििरनिपतितविशेषकार्ययणि एकशेषः: च</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>पाठ: - ८</td>
<td>प्रकृति समासप्रकरणम्</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>पाठ: - ९</td>
<td>स्त्रीप्रत्ययः -</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>पाठ: - १०</td>
<td>स्त्रीप्रत्ययः - चापु टापु टापु प्रत्ययः</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>पाठ: - ११</td>
<td>स्त्रीप्रत्ययः - दीपु दीपु प्रत्ययोः</td>
<td></td>
<td></td>
</tr>
<tr>
<td>२</td>
<td>पाठ: - १२</td>
<td>स्त्रीप्रत्ययः -</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>क्र.सं.</th>
<th>मुद्रीविन्दवः</th>
<th>समासः स्त्रीप्रत्ययः: च</th>
<th>स्वाध्यायः होरा:</th>
<th>भारांश: (अड़कः)</th>
</tr>
</thead>
<tbody>
<tr>
<td>२</td>
<td>पाठ: - १२</td>
<td>स्त्रीप्रत्ययः - भूधातो: तति सुपसाधनम्: च</td>
<td>१००</td>
<td>४०</td>
</tr>
<tr>
<td>पाठ:  13</td>
<td>भवादिप्पकरणे- भूधातो: लट रूपसाधनम् -२</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:  14</td>
<td>भवादिप्पकरणे - भूधातो: लिति लुटि च रूपसाधनम्</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:  15</td>
<td>भवादिप्पकरणे- भूधातो: लूटि लोटि च रूपसाधनम्</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:  16</td>
<td>भवादिप्पकरणे- भूधातो: लिड़ लूड़ लूड़ि च रूपसाधनम्</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:  17</td>
<td>भवादिप्पकरणे - लट लिद्द एतयोः सूत्रशेष:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:  18</td>
<td>भवादिप्पकरणे - लिद्द-लक्षास्य सूत्रशेष</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:  19</td>
<td>भवादिप्पकरणे - लिड़ लुड़ एतयोः सूत्रशेष:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:  20</td>
<td>भवादिप्पकरणे आत्मनेपदप्रकरणम्</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:  21</td>
<td>अदादित्: दिवादियपर्यन्तम् - अद् हु दिद धातव:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:  22</td>
<td>स्वादित्त: स्वादिशपर्यन्तम् - सु तुदु रुध धातव:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>पाठ:  23</td>
<td>तनादित्त: चुरादियपर्यन्तम् - तन कृ क्री चुरु धातव:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 3 | अध्याय:- 3 | ग्निज्ञानान्तिक तद्धित्यपत्याः च- | 62 | 24 |
| पाठ:  24 | तिड़न्ते ग्निज्ञानान्तिकप्रकरणम् |
| पाठ:  25 | तिड़न्ते सन्न्यान्तिकप्रकरणम् |
| पाठ:  26 | तिड़न्ते परस्मैपदम्यपदविधानम् |
| पाठ:  27 | तिड़न्ते भावकर्मप्रकरणम् |

| पाठ:  28 | तद्भिद्धेशु अपत्याधिकार: |
| पाठ:  29 | तद्भिद्धेशु मत्वस्यप्रत्ययाः |
| पाठ:  30 | तद्भिद्धेशु रक्ताद्वस्यकप्रत्ययाः |
| पाठ:  31 | तद्भिद्धेशु ठजाधिकार: |
Bharatiya Darshan
Code No.-347

औदित्यम्

सर्वद्वि जन्तव इष्टं लल्युः इच्छन्तन्। अनिष्टते परिहर्दुम् इच्छन्ति। अनिष्टं इष्टम् दु:ह अनिष्टम।
अतं सुखम् उपायं अपि इष्टं। अनिष्टं इष्टम् अनिष्टम्। अनिष्टम् इष्टम् इष्टम्।
नितं सुखम् आत्मसुखम्। ततं जन्मं नास्ति। न केवलं कारणं ततं सुखम् उत्पदयते।
ततं सुखम् तु आत्मसूचियम्। अनिष्टेऽ सुखम् जन्मं अस्ति। तस्य किमपि भवन्ति।
अनिष्टं इष्टं सवयं हि धर्मं। धर्मं विना सुखं भवति। धर्मविनं जन्यं अस्ति।
वदविषयायागद्वः धर्मं। तद्यागदिजन्यं: पुण्यायकं।

धर्मः। अन्तः करणं वदविषयायागद्वः।

धर्मं इष्टं जन्यं तु स्वयं। सुखम् दु:ह विना सुखं उत्पदयते।
अनिष्टं इष्टं करणं।

ग्रहणं अतं सुखं उत्पदयते। ततं इष्टं जतं साधनं ततं निष्ठेऽन्ति।
किवच सुखम् करणं भेदः। सलिलं तदपि स्थानं जानियताम्।
इष्टम् इष्टं मधुसूदनसाधनम्। इति जानिम् प्रभृतिं प्रति करणं भवति।

पुरुष: नरो वा नारी वा यदि कामये इच्छितं अर्थये स एव पुरुषये। पुरुष्: सुखमेव अर्थये। अत: सुखमेव हि पुरुषये।
सुखस्य प्रकारं: सलिलं। अत: एव पुरुषस्य प्रकारं: सलिलं।
नितसुखं हि मोक्षं: कर्यते। अनिष्टसुखं हि कामं: कर्यते।
कामस्य करणं हि धर्मं: कर्यते। धर्मस्य साधनं हि अर्थं: कर्यते। अर्थं हि धर्मस्य सामग्री धनाधिकम्।
एवं धर्मस्य काममोक्षसाधनेऽकामः। चतुरः: पुरुषां: सुसिद्धा वैदिकसंस्कृतः।

tेतु काममोक्षकश्व मुख्यः। कामस्य साक्षीत ततष्ठ धर्मः।
धर्मस्य प्रयोगव: अर्थं। काममोक्षस्य एव धर्मः। अर्थं: च स्वयं नानाध्ये।
अथ: धर्मोऽ सर्वात्मं। मुख्यः। काममोक्षयोऽ: अपि मोक्षं: नितं। अत: मोक्षं: एव परम: पुरुषः।
अथ: अनिष्टं। इति प्रत्यक्षम् जाते। इद्रेष्यजन्यं सुक्ष्मं कामकं।
इति तदपि अनिष्टेऽ इति अनुभविदभ्यं।
अनिष्टेऽ सुखस्य करणं धर्मं। अपि अर्थुतं अनिष्टये।
एव। न हि करणसङ्क्षेपे काममोक्षाव: भवति।

वेदान्तः मृतः। तदनूकृतः। अनुभवावधि इति एतत्त्र नित्यम् सदा भ्रमणविवेचनं उपलब्धयं।

यत्रकृतं तदनिष्टम्। इति नितम्। इष्टहानुमानोयचिरसिद्धः। धर्मं: कर्मजन्यः। अत: अनिष्टं।
कामं। धर्मजन्यः। अत: अनिष्टं। इत्यं सदनं यतं मोक्षं: एव परम: पुरुषः। निष्ठेऽयात्रां।
मोक्षं: ब्रह्मजानाद। भवति इति। अद्वैतकव्यादितस्य।
सिद्धव:। अत: ब्रह्म किम। तदनान्तः किम।
तत्त्रांतः किम। तत्त्वार्थस्य प्रवाहं किमित्।
तत्त्वाविवेचने अद्वैतकव्यादि प्रकरणानि अति सलिल।

सर्वद्वि दाशप्रीक्षाकार्यां सुखवान्धर्मेऽ एततं। परस्तु सुखसाधनविवेच एवरूपविवेचे तथैव नैके मतसङ्क्षेपे सलिल।

दशमकशायः। शैवे समेतामणि दर्शनानाम्। सामान्यं। परिचयं। विद्यते।
वेदान्तकस्य प्रस्तावानाम्। वेदान्तसम्पदायानां विशेषं।
एववः अद्वैतकव्यादि प्रकरणानि। संस्करण केवल विषया
उपन्यसः। स विषयः दशम्याम् पठलि प्रस्तात्। तस्य पथस्य द्वादशक्षायाः पाठः सूचिः प्रतितेष्ठा। अतः
दशम्याम् पाठः स्मारकः अद्यावयनं विधाय द्वादशक्षायाः पाठा अद्वित्त्वा। तेन विषयस्यास्य सुष्कृत जानां
भविष्यति।

d्वादशक्षायाः अस्मिन् पाठ्यक्रमम् सांख्यान्य दर्शनस्य विशेषः परिचयः कारितः। यतो हि कपिलस्य
सांख्यदशान्तिः वेदान्तस्य अति निस्फूर्तम्। मुखः पूर्वपक्षः। च। सांख्यान्य गुणविधारः पुष्पविधारः
सृष्टिविधारः। इत्यदिकम् अद्वैतवेदान्ततः किल्यित्त परिवर्तनेन गृहीतः दशयते। अतः पूर्वपक्षत्वेन
मूलत्त्वेन च सांख्यान्यम् अध्ययनम् अत्यन्तम् आवश्यकत्वानि हेतुः। अतः सांख्यदशान्तिः विषयः अतः उपन्यस्यान्तः।

सकलानि दर्शनानि प्रमाणविषये स्वमतम् अभ्युपगच्छन्ति। वेदान्तिनोपि तथैव स्वमते रहः। सन्ति।
अतः अद्वैतवेदान्ततः कालि प्रमाणाणि इत्यथः अस्यपाठ्यक्रमस्य वैशिष्ट्यम।

इत्यथा बहुः। प्रकारः पाठ्यक्रमः छात्रहिताय निविदतः। तेन दर्शनिविद्वर्त्तानि सुगमानि भविष्यन्तिः।

इति आशास्महै।

अधिकारी

अथ यथाविषयः सम्पूर्णस्पेन संस्कृतभाषया लिखितः। अस्ति। परीक्षा अर्थं संस्कृतमाध्यमेन एव
भविष्यति। अतः अस्य पाठस्य कः अधिकारी इति नूनम् समुदेश्यत प्रशः।

अतः स छात्रं। अधिकृतः यः। -

अधीतकाल्यकारणकोशः। अनधीतदर्शनशास्त्रः।

न्यायशास्त्रस्य तर्कसंग्रह इति गन्त्यं दीपिकासहितं जानाति।

न्यायभाषा अथीतत्नायास्य शैलीं जानाति।

सरलसंस्कृतं सांस्कृतिसहित्यास्य सरलगद्यांशपूर्वपक्षः पद्यांशाशवं च पतितम् बोधु च शक्नोति।

सरलसंस्कृतं बोधु शक्नोति।

स्वभावं संस्कृतभाषया लिखितवा प्रकटपितंशु शक्नोति।

दर्शन दितशुः मुमुषुचयः।

प्रयोजनम् (सामान्यम्)

उच्चमाध्यमिकस्य भारतीयदर्शनस्य पाठ्यतत्व योजनस्य कालिचन उदेश्यानि अत्यधि दीयते।

जीवनस्य चारणलक्ष्यं सुखालामः। इह पत्रशः। तद्विषयं स्पष्टं जान छात्रस्य भवतु इति लक्ष्यम्।

बहुः। दर्शनानि सुखप्रतिपादनात् प्रवृत्तानि विस्मितवते। तेषु विशेषस्य कालि कारणानि इति जातवा छात्रः

सुदृढः विचरतन कर्तृम प्रभावे।

जीवनेऽविभिन्नानि दर्शनिकसस्मिद्यावनि परस्परकलहस्य कारणः जातवा तेषु सोहादृश्य निर्माणयाय प्रवर्तेन इति

सामाथ्याम् छात्रस्य जायताम।

स्वस्य च वर्षोपितानां जीवनं दर्शनमवलम्ब्यं नेतुम शकुन्यते।

भारतीयदर्शनस्य महिमानाम् अवगम्य तस्य प्रचारे बढादरः। सश्रं द्वार्तताम।

251
अति प्राचीनाया भारतीय जानसम्पदः वैज्ञानिकतां सर्वज्ञानपकारितां महिमान्त च सगर्व जगति जगति प्रसारयेत् छातः।
दर्शनस्य सामान्य जानज्ञान भविष्यम् येन दर्शनिकगतिः प्रचलनं अन्तर्निः पठिता छात्राः तेषाम्
अन्तर्नामां अर्थान् जार्यान्तः। ते सततः भौखिकी लिखितां च अभिब्यक्तिं कर्तुं शक्यान्तः।
दर्शनधययनेन छात्राः महाविद्यालयस्तरे विश्वविद्यालयस्तरे च प्रवर्तमानेन पाठ्यक्रमेऽख्यानन्याथ्यम्
अवसरं पार्थसं सम्वर्थः भविष्यन्तः।
दर्शनिकचिन्तनेन सिद्धान्तः भूत्वा शक्तः संलग्नाश्च भविष्यन्तः।

प्रयोजनम् (विशिष्टम्)

दर्शने प्रवेशस्य सामान्यम्

दर्शने के विषया अन्तर्भविन्ति दोऽति सामान्यज्ञान भवेत्।
आसितकारातिसंख्यानेदस्य जानं भवेत्।
अद्वैतदेवा विभिन्नश्च: परिचयः भवेत्।
पठितसांस्कृतग्रंथम् आभितां जयतां दास्यन्ति।

दर्शनधययने सामान्यम्

सांख्यान्तः दर्शनस्य विशिष्टं परिचयं प्राप्तुयत।
अद्वैतदेवान्तं प्राप्ताः अध्यायेऽः अप्वादः मोक्षः तत्त्वाधानानि इत्यादीनां बहूं विषयाणां जानं भवेत्।
देवान्तं तथा विकृतां जानानि संविस्तरं जानं भवेत्।
अस्य राज्यविश्वस्य जानेन तपस्मिन् दर्शने विद्यामालानां अन्ये आदर्शनन्याथ्यान्म अध्ययने सम्वर्थः
भवेत्।

दर्शनप्रयोगस्य सामान्यम्

दर्शनस्य स्पष्टं जानं प्राप्त व्यवस्य जीवने तस्स्य प्रयोगं कृत्वा कृतकृत्यो भविष्यतिः।
यथा वैद्यः जानं इष्टव्यं तस्स्य रोगांकिः चिन्तयत। चौरः चिन्तकारकं चिन्तयत। वणिक क्रेतास्मि
पश्यत। तथा जगत्: दर्शनिकक्रमेण दर्शने सम्बर्थभवेत्।
अन्येययामपि दिग्बाहान्तां जानानि जीवने पथप्रदर्शकप्रदीप्तवटः सहायो भविष्यतिः।

पाठ्यसामग्री

पाठ्यक्रमेण सह निम्नलिखितसामग्री समायोजिता भविष्यति-

दृवे मुद्रिते पुस्तके।
एकं शिक्षकाङिकतं-मूल्यांकनप्रत्यर्म प्रदातायते। अनेन सह छात्रः एकं परियोजनाकार्यमपि (Project)
करणीयम।
दर्शनस्य शिक्षणं प्रायोगिकक्रमेण अभि भविष्यति। परन्तु प्रायोगिकमरीक्षा काशि नासित।
पाठ्यमूल्यीय संपर्ककक्षाएँ तथा अध्यापनकाले छात्राश्रृंखलाएँ सम्यक विकासः भवेत् इति ध्यात्व्यम् भविष्यति। अनेन तेषु स्वतः युक्तिसमन्निषिद्धतिशक्तिः विकासः भविष्यति।
मुक्तविद्यालये प्रवेशार्थेन पाठ्यक्रमाद्वारे स्वदेशार्थी एकार्थतः अधिकाधिकं पञ्चवर्षां पूर्यं शक्यते।

अंकमूल्यायनप्रविधि: परीक्षायोजना च

पत्रस्य (१००) शतम् अंकः सन्निः। परीक्षाकालः होरात्रायत्मकः। अस्य पत्रस्य लिखितस्वरूपमेवासित (Theory)। प्रायोगिकरूपम् (Practical) क्रिमिपि नासित्। क्रमिकम् (Formative) समुचितां (Summative) चेतै दृष्ट्विधं मूल्यायनं भविष्यति।

क्रमिक मूल्यायनम् - विशेषतः अंक्कां (२०) शिल्पकाक्षकिंगत्स्य कार्यस्य (TMA) एकं पत्रं स्वातः। अस्य मूल्यायनम् अध्ययनकेन्द्रे (Study Centre) भवेत्। अस्य कार्यस्य अंकः अंकपत्रिकायां (Marks sheet) पृथक विलिखित: स्युः।

समुचितं मूल्यायनम् - वर्ष वार्तालयं (मार्थमसाय अक्टॉबरमासाय च) बाह्यपरीक्षा भविष्यति। तत्र परीक्षायां समुचितां मूल्यायनं भविष्यति।

प्रश्नपत्रे जाननम् (Knowledge), अवगमम् (Understanding) अभिव्यक्तिः (Application skill) चावलम्ब्य युक्तानुपालन प्रश्नाः समाविष्टाः: स्युः।
परीक्षास्य अतिलघुत्ततात्मकः लघुत्ततात्मकः-लिबन्धात्मकः-प्रश्नानामपि समावेशः: भविष्यति।
सूतर्थः सूचनाया सुप्रसाधनम् इतित ज्ञो मुख्यः: विषयः: स्युः। अन्ये प्रस्तव्तानुप्रस्तकाः केवल विषयः: अपि स्युरिति अवधेयम्।

उत्तीर्णितां पणः (condition) - प्रतिशतं सत्यस्विशेषं (३३%) अंकः उत्तीर्णितां पणः (मानदंडः) व्यति।
संस्थानस्य परीक्षायामं उत्तरसेधनभाषा - संस्कृतस्य (अनि)भाषयः

अध्ययनयोजना

निर्देशभाषा (Medium of instruction) - संस्कृतस्य।
स्वाधीनता कालावधि: (Self-study hours) २५० होरः।
न्यूनत: त्रिशतं (३०) सम्पर्ककक्षाः (Personal Contact Programme - PCP) अध्ययनकेन्द्रेऽपि भविष्यति।
भाषाः - सैदन्तिकः (Theory) शतं प्रतिशतम्।
प्रायोगिकम् (Practical) - नासित।

253
उत्तरीणता-मानदंड: सैद्धांतिकस्य 33%  
आयु: १५ वर्षम्
निर्देशभाषा: संस्कृतम्
विषयावधि: २४० होरा
अड्डविभाजनम्
अग्रे सारण्यां दृष्ट्ययम्

पाठ्यविषयस्य उदेश: (पाठ्यविषयविन्दवः)

उच्चतरमाध्यमिकक्षाया भारतीयदर्शनस्य पुस्तकेण निम्नविषयः। अन्ततंबलित।
विवरणमधस्तादुपन्यस्यस्यातः।
समग्रस्य पाठ्यविषयस्य त्रयो भागः: प्रकल्पिताः। सन्नित। प्रतिभागम् कर्तवे पाठा। स्वाध्यायक कर्ति होरा।।
सैद्धांतिकपरिशिष्टाय विज्ञानं अंशं। प्रायोगिकपरिशिष्टायां विज्ञानं अंशं। प्रत्यध्यायम् अड्डविभाजनं वेति विषयः।
अत्र प्रदीयमन्त।

अध्यायः - १ सांख्यदर्शनम् (पाठा: १-४)

अध्यायस्य औचित्यम्

महर्षिः कपिलः हि जन्मना सिद्धः। सर्वशास्त्री दर्शनानां तद्दर्शनादेव प्रारम्भः। एवच कपिलस्य
सांख्यदर्शनं वेदान्तस्य अति निकटम्। मुखः पूर्वपकः च। सांख्यानां गुणविचारः पुरुषविचारः सृष्टिविचारः।
इत्यादिकम् अद्वैतवेदान्तं किंचित् परिवर्तनेन गृहीतं दर्शयते। अतः पूर्वपक्तवेदन्म भूतवेदन्म च सांख्यानाम्
अध्ययनम् अत्यन्तम् आवश्यककिंति हेतृः। अत्र सांख्यदर्शनस्य प्रोक्ताः। विषयः। अत्र उपन्यस्यः।

अध्यायः - २ वेदान्ते प्रमाणानि (पाठा: ५-१०)

अध्यायस्य औचित्यम्

निर्मित्येन जानं ममास्तुति को वा न वाच्छति। परन्तु जानं कथं भवति, केन माध्यमेन भवति इति स्पष्टतः
आवश्यकी। तत्र वेदान्तमते भावितर्हितं जानं प्रमा केन भवितं। इति वेदान्तितः कालेप्रमाणानि अवकूलविद्धः।
तेषां स्वरुपं किम्, प्रक्रिया का, प्रमेयाणि कानि, प्रमाध्येदा। केकै कार्यः इति तैके विषयः। अस्मिन प्रकारं
प्रतिपाद्यः। न्यात्यशैल्यः। जानं विज्ञा अस्व स्वीकारस्य अध्ययनम् दुष्करम्। इति हेतृः। तत्र तत्र न्यायशैल्यः। अपि
विस्तरः प्रदर्शनीयमत्वेन आपत्ति।

अध्यायः - ३ अद्वैतवेदान्ते अध्यायोः (पाठा: ११-१६)

अध्यायस्य औचित्यम्
सकलदर्शनानां सामान्यपरिचयः, अद्वैतदान्तस्तव विशेषपरिचयः च माध्यमिकक्षायां कारितः। तथापि अद्वैतदान्तदर्शनेन स्वस्य सिद्धान्तः कथं सिद्धान्तितः, कामि: युक्तिः समाधिः। युक्तिप्रदर्शनस्तव 
प्रमाणानि वा काळः इत्यदिदिस्वमपि सविस्तरं नातवत्यम् भवति छावेण। अतः दर्शनेषु मूर्ध्यन्यस्तव 
दशनस्यैव सविस्तरं परिचयो भवतु इति धिया अद्वैतदान्तदर्शनस्तव प्रकरणशः विभागं परिकल्प्य द्वादश्यामः 
उपन्यस्यन्ते। तत्र ब्रह्म माया इति जानितर्वन कथम् अध्यायः भवति, कथं ततः सृष्टि: भवति इति विषयः अत्र 
उपन्यस्तः। अर्थं विषयः अध्यायोऽपि: इत्युच्यते।

अध्यायः - ४ अद्वैतदान्तेन्ते अपवादः (पाठः - १७-२६)

अध्यायस्य आचित्यम्

पूर्वभागे अध्यायोऽपि: जातः। अध्यायोपस्तव अपवादः कथं करत्वः इति विषयः अत्र प्रमुखो भवति। अत्र 
अस्थायत्र पश्चात्कोशः महाव्यविचारः समाधिः। तत्साधननिमित्ती विषयः अत्र प्रतिपाद्यः सनितः। वदान्तस्तव 
जगति प्राचार्य प्रमुखः कार्यः येन कृतं यद्वादि भारतीयजानस्तव गौरवं जगति वर्तते तस्य स्वास्मिनो 
विवेकानन्दस्तव मंतं किमिति विषये एकः अन्ते योजितः असितः।

पाठ्यविषयस्य उदेशः (पाठ्यविषयविन्दवः)

उद्घरतमाध्यमिकक्षायाः: भारतीयदर्शनस्तव पुस्तके निम्नविषयः: अन्तभेदविन्ति -

<table>
<thead>
<tr>
<th>क्र.सं.</th>
<th>मुख्यविन्दवः</th>
<th>स्वाध्यायः (डूबकः)</th>
<th>भारांशः</th>
</tr>
</thead>
<tbody>
<tr>
<td>१</td>
<td>अध्यायः - १</td>
<td>सांख्यदर्शनम्-</td>
<td>३६</td>
</tr>
<tr>
<td>पाठः - १</td>
<td>प्रकृतिपूर्वपरिचयः- सांख्यपदस्याधे: सांख्यायायः: तद्यथाः: सांख्यतत्त्वानां सामान्यपरिचयः: पुरुष: बन्ध: मोक्ष:</td>
<td>६०</td>
<td>३०</td>
</tr>
<tr>
<td>पाठः - २</td>
<td>प्रकृतिपूर्वपरिचयः- प्रकृति: प्रथ्यानुपरिचयः: गुणन्तत्त्वाविचारः: पुरुषबहुत्तविचारः: साम्यावस्थाः: प्रकृतेष्व प्रृवित्तिः:</td>
<td>६०</td>
<td>३०</td>
</tr>
<tr>
<td>पाठः - ३</td>
<td>सृष्टिविचारः: सृष्टितत्त्वाः: सृष्टिपदार्थाः: सृष्टिकारणाम्: सृष्टि प्रयोगन्तम्:</td>
<td>६०</td>
<td>३०</td>
</tr>
<tr>
<td>पाठः - ४</td>
<td>सत्यावलेखः- साधकयुक्त: शृण्यकार्यावलेखः: असत्यावलेखः: विवर: विशेष:</td>
<td>६०</td>
<td>३०</td>
</tr>
<tr>
<td>२</td>
<td>अध्यायः - २</td>
<td>वदान्तेन प्रमाणनि-</td>
<td>६०</td>
</tr>
<tr>
<td>पाठः - ५</td>
<td>प्रमाणानि- प्रत्यक्षप्रमाणानि: भूमिका, दर्शन, ज्ञानादि: प्रमा</td>
<td>६०</td>
<td>२०</td>
</tr>
<tr>
<td>पाठः - ६</td>
<td>प्रमाणानि- प्रत्यक्षप्रमाणानि: लक्षणां: परिष्कारः: प्रत्यक्षप्रयोजनकिरित्विचारः</td>
<td>६०</td>
<td>२०</td>
</tr>
</tbody>
</table>

255
| पाठ: 7 | प्रमाणानि- प्रत्यक्षप्रमाणानेदा:। लक्षणानि। |
| पाठ: 8 | प्रमाणानि- अनुमानम् - लक्षणाम्। न्यायः। संबेद्यः। समिद्धात्वम्। उपमा:रूपः। |
| पाठ: 9 | प्रमाणानि- आयामः। वृत्तिः। वाक्यशब्दोऽदेहवः। |
| पाठ: 10 | प्रमाणानि- अर्थार्थानि-। अनुपपन्धिः। प्रामाण्यानम्। |

3 अध्यायः-3 अद्वैतवेदान्ते अध्यारोपः- ५४ २२

| पाठ: 11 | वहमवक्षणम्- वहमपदस्यार्थः। वहमणः। स्वरूपलक्षणम्। 
| पाठ: 12 | सत्त्यलक्षणम्। निर्गुणव्रहमः। सारणव्रहमः। |
| पाठ: 13 | मायालक्षणम्- मायापदस्यार्थः। मायाः। लक्षणाम्। अनादित्वम्। 
| पाठ: 14 | त्रिगुणात्मकत्वम्। मायासत्त्वे प्रमाणानि। मायायाः एकत्वपुष्टविविचारः। |
| पाठ: 15 | अध्यासः-। अध्यासप्रयोजनम्। पद्यत्वत्पतिः। स्वरूपम्। निमोत्तमः। 
| पाठ: 16 | फलम्। अध्याससत्त्वे प्रमाणम्। |

4 अध्यायः- ४ अद्वैतवेदान्ते अपवादः- ६० ३६

| पाठ: 17 | अवस्यायात्विवेकः-जागरुक्त्वपनसुप्तिः। विश्ववेदान्तादिकम। |
| पाठ: 18 | पञ्चवक्षेत्रश्-। अध्यायोपावादो। अन्नमयायादिपञ्चशः। तैत्त:। 
| पाठ: 19 | भिन्न आत्मा। वहमणः। उपाधिवशादृशः। |
| पाठ: 20 | महावाक्यविवाचः-। चतुर्गुणम् महाभाष्यायाः तात्त्व्यम्। |
| पाठ: 21 | महावाक्यविवाचः-। पदान्वयविवाचः। लक्षणादीनाम्। उपयोगः। 
| पाठ: 22 | पदार्थसंशोधनम्। |

| पाठ: 23 | साधनविचारः-। अनुबन्धः। कर्मः। निष्कामकर्मः। |
| पाठ: 24 | साधनविचारः-। निष्कामकर्मः। उपासना। |
| पाठ: 25 | साधनविचारः-। तत्त्व:। साधनचतुर्विषयम्। श्रवणादि। |
| पाठ: 26 | समाधिस्वरूपम्। निदिद्धायानम्। समाधिभेदः। चित्तवृत्तिः। |
| पाठ: 27 | समाधिसरूपानि। अन्तरायाः। |

256
| पाठ:  - २६ | जीवनमुक्तः विदेहमुक्तः- अहं ब्रह्मास्मि। अखण्डाकाराकरिता चित्तवृत्तः। कर्मेन्तैविध्यमः। लक्षणम्। |
| पाठ:  - २७ | विवेकानन्दवेदान्तचिन्तनम् - विवेकानन्दमते वेदान्तस्य व्यावहारिकता। योगसम्बन्धः। आधुनिकता। प्रासঙ्गिकता। |
संस्कृते काव्यसम्पत्ति: सागरवत् अपारा अमूल्या च वर्तते। तत्र अस्माकं सनातनजानाराशि: तदात्मकं जीवनं च प्रतिविम्बितं वर्तते। कविनां काव्यानाम् अलंकाराशास्त्रस्य च अध्ययनं छात्रस्य भूमिका अपेक्षितः। काव्यरशे: मूलं स्वरूपं वदेदे एव दशयते। साहित्यस्य प्रवेशार्थे वेदादिवाद्यमयस्य परिचयं आवश्यकं: अर्थं। अर्थं वदेदे उपदिष्टं तत्त्वमेव काव्येन प्रकटीक्रियते। वेदस्तु षड्गर्तिः स्वतंत्रता अस्ति। अतः वेदस्य षड्गर्तिर्ग्रामचर्यं अर्थं आवश्यकं। वेदकाव्यो: मध्यवर्ती पुराणसाहित्यम्। तस्मात् पुराणस्यार्थम् सामान्यपरिचयं: आवश्यकं। स च अत्र अस्ति। एवं वेदस्य पुराणस्य च परिचयं प्राप्य काव्यस्य प्रवेशं: भवति।

संस्कृतनाम सुपरिष्कृता जीवनपद्धति: यथा क्रमशः आत्मोद्वरः। सिद्धांत:। भारतीयसनातनसंस्कृति: चतुर्भुजः। पुरुषार्थः: परिकल्पिता वर्तते। धर्म: अर्थं: काम: मोक्ष: इति चत्वारः। पुरुषार्थः। कामो नाम लौकिकजीवनसम्बन्ध: सुखं वा। अर्थो नाम तार्किकमुखलाभार्थम् अपेक्षितानि वस्त्र-आहार-धन-क्षेत्रधीनी जीवनसाधनानि। धर्मो नाम अर्थानामजने तदत्तरा सुखलाभेश्व शास्त्रव्यक्त: नियमविशेषः। मोक्षः अनन्तं: शाश्वतनान्दः। एत्यथा विवेकं वेदं: परं प्रमाणम्।

कवे: कर्म काव्यम् इति आलंकारिका वदन्ति। तत्च रमणीयं शब्दार्थेणूर्गलम्, रसालमं काव्यम् इत्यपि अन्यान्यविद्वांशः वदन्ति। अस्मत्परस्मार्गाः जीवनविवेकाय शास्त्रमार्ग: इव काव्यमार्गाः। अतीव आदर्शत वर्तते।

वेदं: प्रभुमुद्धितं: इत्युच्चते। पुराणं मित्रसम्भितम् उत्पन्नते। काव्यं हि कांतासम्भितं भवति। कान्तासम्भितं नाम कान्तासहस्त्रम् इत्यथं। कान्ता नाम प्रया भार्या इत्यथं। (यदा) लोके साध्वी कुशला च कान्तांर्काम प्रिय: जनास्मानं: पुरूषार्थः। तदा सा साकारः अभिप्रायवाचकः वाक्यं परित्यज्ञति। तत्त: स्मितकालश-मुखायस्मादिकं विषेषमुपरि: सर्वे परस्परः स्वाभिप्रायवृक्षचः। वचने: अभिमतार्थे जापयन्ति तत्र कान्तां प्रवृत्तयति। यथा किम् आलंकारस्य उत्तरायम् सर्वमार्गस्य इति कान्तं: कान्तां पुरूषार्थः। तदालंकारस्यायमिः इति साकारः न वदति। आलंकारनं मधुरं परस्मार्गुं तत्स्विधिविशेषः: भवति इति वदति। तेन तदेव उक्तं भवति यत् आलंकारस्य आलंकारिक इति कान्तं: कान्तां पुरूषार्थं। तदालंकारस्यायमिः इति साकारः न वदति। आलंकारस्य मधुरं परस्मार्गुं तत्स्विधिविशेषः: भवति इति वदति। तेन तदेव उक्तं भवति यत् आलंकारस्य आलंकारिक इति कान्तं: कान्तां पुरूषार्थं। तदालंकारस्यायमिः इति साकारः न वदति। आलंकारस्य मधुरं परस्मार्गुं तत्स्विधिविशेषः: भवति इति वदति। तेन तदेव उक्तं भवति यत् आलंकारस्य आलंकारिक इति कान्तं:
ईशान्रां काव्यानाम्, कवीनाम्, काव्याशास्त्रस्य च परिचयः छात्राणाम् भवतु इति धिया संस्कृतसाहित्यस्मान् प्राप्तं पाठ्यतत्त्वेन योजयेत। (Communications Skill) भावविनिमयकोशालं पुरा अद्यापि च गुरुत्वम् आवहति। स्वाभिप्रायः कथं साक्षात् परोक्षतः वा प्रकटवितं शक्यं इति काव्यात् जातं। इत्यं काव्याध्ययनस्य बहुनिः प्रयोजनानि सन्तीति औषितत्वम् आवहति यदृ सर्वश्रेष्ठानां कवीनाम् काव्यानि पठनीयानि इति।

अधिकारी

अथ पाठ्यविषयः सम्पूर्णरूपेण संस्कृतभाष्या लिखितः अस्ति। परीक्षा अथि संस्कृतमाध्यमनेन एव भविष्यति। अतः अस्य पाठस्य कः अधिकारी इति नूतनम् समुदेति प्रशः।

अत्स स छात्रः अधिकृतः यः -

• अधीतात्याकरणकोशः काव्यारसपिपासः।
• सरलसंस्कृतं, संस्कृतसाहित्यस्य सरलगद्यांशान् पद्यांशान् च पठितम् बोधुं च शक्योति।
• सरलसंस्कृतं बोधुं शक्योति।
• स्वभावं संस्कृतभाष्या सिद्धित्वा प्रकटवितं शक्योति।

प्रयोजनम् (सामान्यम्)

उच्चतरमाध्यममिकस्तरे संस्कृतसाहित्यस्य पाठ्यतत्त्वेन योजनस्य कालन्त्रानि उद्देश्यानि अन्नाधि दीयन्ते।

• जीवनस्य चरमलक्ष्यं सुखलाभः। इह परत्र च। काव्याध्ययनेन तत् सिद्धतिः। अतः अध्येतृणां सिद्धतिः।
• बहुः काव्यानि सुखप्रतिपादनाय प्रवृत्ताणि सफलानि विफलानि च भविष्यति। तत्र वैचल्यस्य कारणानि कालं इति जात्वा छात्रः। काव्यस्य सूक्ष्मं चिन्तनं कर्तुम् प्रभवेत्।
• वक्तः यथा स्वस्य विचित्राभिः। उक्तिः। जनानां रञ्जयति तथा काव्याध्ययनेन छात्रः पिण सामार्थ्यम् अर्जयेत्। अन्यकृतस्य काव्यस्य च आदरं कुर्यात्।
• स्वस्य स्वपरिचितानां च जीवनं काव्यस्य परिपूर्णं कर्तुं प्रवर्तते।
• संस्कृतकाव्यानां महिमानम् अवगम्यं तत्प्रचारे बद्धारं। सम्रां प्रवर्तताम्।
• अतः ह्यानायाः भारतीयानसम्पदः। वैसाज्ञिकं सर्वज्ञोपकारता महिमा च सगवं जगति प्रसारयेत् छात्रः।
• काव्याध्ययनानम् सरलानुं अंशानुं पठित्वा छात्रः। तेषां अंशानाम् अर्थानं जास्यन्ति। ते स्वतं रूपस्वरूपं लिखितं च अभिव्यक्तिः कर्तुं शक्यन्ति।
• काव्याध्ययनेन छात्रः। महाविद्यायस्तरे विश्वविद्यायस्तरे च प्रवर्तमानेषु पाठ्यक्रमेषु अध्ययनार्थम् अवसरं प्राप्तं समर्थः। भविष्यति।
• काव्येशु सूचिमान् भूत्वा शक्तः संलग्नः भविष्यति।

प्रयोजनम् (विषिष्टम्)

संस्कृतसाहित्येऽप्रवेशस्य सामार्थ्यम्
• काव्येषु के विषया अन्तर्भवत्वलि इति सामान्यजानं भवेत्।
• कवीनां परिचयं प्राप्नुयात्।
• काव्यानां परिचयं प्राप्नुयात्।
• काव्यालुककारलशनदासम् परिचयं प्राप्नुयात्।
• रससिद्धानं जानीयत्।
• पठितसामग्रीम् आश्रितानं प्रश्ननाम् उत्तराणि दातूः प्रभवेत्।

संस्कृतसाहित्याध्ययनं सामार्थ्यम्
• काव्यालाम् अध्ययनस्य कस्थित्व विषिष्टः क्रमः वर्तते। तज्ज्ञानं प्राप्य काव्यस्य अन्यो अध्ययने समयां भवेत्।
• काव्ये विद्यामानं छन्दसाम् अल्पकारणां व्याकरणांशान् च जान्यति।
• तेन जानने अन्येऽवर विद्यामानानां अल्पकारादीनां जानं भवेत्।
• कवीनाम् अल्पकारिकाणां च परिचयं प्राप्नुयात्।
• छन्दः अल्पकारं रसं: इत्यादिनां विषयानु बुद्धवा स्वयं काव्यरचनायां सामार्थ्याशाली भवेत्।
• अस्य पाठ्यविषयस्य जानने तपस्ननं दशनं विद्यामानानाम् अन्येषाम् आकर्षणानाम् अध्ययने समयां भवेत्।

संस्कृतसाहित्यप्रयोगस्य सामार्थ्यम्
• संस्कृतकाव्यानाम् अध्ययनेऽस्तस्य वाचि काव्यात्मकता स्यात्।
• अपराृतस्य काव्यप्रयोगस्य जानं भवेत्।
• भावविनिमयं: प्रभावित्वय करुः प्रभवेत्।
• वाण्या भावविनिमये अल्पकारादीनाम् शास्त्रसम्बन्धं प्रयोगं करुः प्रवर्तेत्
• वाचि विद्यामानं संयोगगतिर्वासामार्थ्यम् अवगच्छेत्।
• यथा वैद्यं: जानं हस्तं ततः रोगादिकं चिन्ततयति। चौरं: वित्तकोषादिकं चिन्ततयति। वणिकं क्रेिताम् पशुयति। तथा जगतः कविस्पेषण दर्शने समयां भवेत्।

पाठ्यसामग्री

पाठ्यक्रमेन सह निम्नलिखितसामग्री समायोजिता भविष्यति
• द्वे मुद्रिते पुस्तके।
• एक शिक्षकाकृति-मूल्यांकनप्रमुख प्रदायक। अनेन सह छात्र: एक परियोजनाकार्यमणि (Project) करणीयमणि।
• कार्यशास्त्र शिक्षण प्रायोगिकरूपमणि अपि भविष्यति। परन्तु प्रायोगिकपरीक्षा कार्य नास्ति।
• पाठ्यपुस्तकों संपर्ककायको च अध्यायपकाय छात्रेऽ जीवनकोशलाना सम्यक विकासः भवेतु इति 
  ध्यात्त्वम् भविष्यति। अनेन तेषु स्वतः युक्तिष्णमत्तिष्णत्ववश: विकासः भविष्यति।
• मुक्तविद्यालये प्रवेशोत्तरं पाठ्यक्रममिंद्रि विद्यार्थी एकवर्ष: अधिकाधिकं पञ्चवर्षः पूर्वितः श्रवणीय।

अद्वैतमूल्यांकनप्रविधि: परीक्षायोजना च

• पर्याय (१००) शतम् अडङ्कः सति। परीक्षाकालः होरात्स्तामतः। अस्य पर्याय 
  लिखितस्वतममेवास्ति (Theory)। प्रायोगिकरूपमें (Practical) किमपि नास्ति। क्रमिकम् 
  (Formative) समूचितमं (Summative) चेति द्विविधं मूल्यांकनं भविष्यति।
• क्रमिकं मूल्यांकनम् -विशेषः अडङ्कानां (२०) शिक्षकाकृतिपाठ्यक्रम (TMA) एक पत्रम् स्वातः।
  अस्य मूल्यांकनम् अध्ययनकेल्द्रे (Study Centre) भवेतु। अस्य कार्यस्य अडङ्कः अडङ्कपत्रिकायां 
  (Marks sheet) पृथक उल्लिखितः: स्पुः।
• समूचितं मूल्यांकनम् -वर्ष वार्तन्त्यं (मार्चमासिः अक्टूबरमासिः च) बाह्यपरीक्षा भविष्यति। तत्र 
  परीक्षायां समूचितं मूल्यांकनं भविष्यति।
• प्रश्नपत्रे जानम् (Knowledge), अवलम्बम् (Understanding) अभिव्यक्तिः (Application skill) 
  वालम्यभु युक्तानुपातेन प्रश्ना: समाविष्टा: स्पुः।
• पत्रेशास्त्र अतिलघुत्तरात्मकः घुप्तरात्मक-निबन्धात्मक-प्रश्नानामपि समावेशः भविष्यति।
• सूत्त्रार्थः: सूत्त्रव्याख्या सुपसाधनम् इति तद्यो मुख्यः: विषयः: स्पुः। अन्ये प्रश्नानुप्रस्तावः केचिद् 
  विषयः: अपि स्पुःदितृर्थितं अध्यायम।
• उत्तीर्णतायेः पणः (condition) - प्रतिष्ठान त्रयस्त्रिशृद्ध (३३%) अडङ्कः उत्तीर्णतायेः पणः (मानदण्ड:) 
  वर्त्ते।
• संस्थानस्य परीक्षायाम् उत्तरलेखनभाषा - संस्कृतम् (अनिवार्यम्)

अध्ययनयोजना

• निर्देशभाषा (Medium of instruction) - संस्कृतम्।
• स्वाध्यायाय कालावधि: (Self-study hours)२४० होरा:
● न्यूनत: विशेष (30) सम्पर्कक्षा: (Personal Contact Programme - PCP) अध्ययनकेन्द्रेण भविष्यनित।

● भारांश: - सैद्धांतिक: (Theory)शतं प्रतिशतम्।

● प्रायोगिकम् (Practical) - नासित।

● उत्तीरणता-मानदंड: सैद्धांतिकस्य 33%

● आयु: १५ वर्षम्

● निर्देशभाषा: संस्कृतम्

● विषयावधि: २४० होरा

अड्कविभाजनम्
अघो सारण्यां दृष्टिव्यम्

पाठ्यविषयस्य उद्देशः (पाठ्यविषयबिन्दवः):

उच्चतराध्यायमिकक्षाया: संस्कृतसाहित्यस्य पुस्तके लिम्बविषया: अन्तर्भविति।
विवरणमध्यस्मातृपन्यस्यते।

समग्रस्य पाठ्यविषयस्य भागाः प्रकल्पिताः सन्ति। प्रतिभागम् कति पाठं: स्वाध्यायय कति होराः, सैद्धांतिकपरीक्षायायम् कियान् अशं:। प्रायोगिकपरीक्षायायम् कियान् अशं:, प्रत्येक्यायम्
अड्कविभाजनं चेति विषया: अन्य प्रदीपण्ते।

परिच्छेद: - १ कविपरिच्छय: (पाठा: १-३)

अध्यायस्य ओवित्यम्

ये: कविभि: संस्कृतं रम्यं कृतं, काव्यावधानेन पोषितं तेषा देशकालकृति-विषये रसिकानां
जिज्ञासा स्वाभाविकी एव। तदेवात्र विज्ञितां उपन्यस्यन्ते।

परिच्छेद: - २ काव्याध्यायनम् - १ (पाठा: ४-१४)

अध्यायस्य ओवित्यम्

कविकुलगुरुः कालिदासः। तस्य श्रेष्ठा रचना रघूवंशम्। छात्रः कालिदासशैल्या रघूवंशं जानीयः:,
तन्माध्यमेन काव्यरसावाद कुप्यः: इति अत्र रघूवल्लस्य प्रथमसंसर्गत: कश्चिदेशः अत्र उपादाय
व्याख्यायंते।
नैकै काव्यस्य प्रकारः। स्तोऽत्र जनानां मन्नासि रमयति। अतं: बोधाय मोदाय च सुप्रसिद्धं स्तोऽत्रः। मोहमदुराख्यम् प्रदीप्यते। अभ्यकादास्य गद्यकाणित्वं शिवराजविनायः। अति प्रसिद्धम्। तस्य अंशविशेषः। अतर्उपस्थाप्यन्ते।

परिच्छेदः - 3 काव्याध्ययनम् - २ (पाठः १२-१६)

अध्यायस्य आौौित्यम्

उत्तररामचरितं नाम नाटकं इववै:। सर्वोक्त्रेण त्वां मन्यन्ते विदवांसः। अत्र रामायणस्य उत्तरर्थिनविग्नितम्। नाटकभक्तं सप्ताहिकात्मकं वर्तते। लड़कायाः: महाराणे श्रीरामेण रावण निन्दति सीता अशोकक्षानात् उद्धरि। तत्: वनवासं समाप्तं अयोध्यायं प्रत्यागतं। तत्: रामस्य राज्यार्थी: सम्पन्नः। तत्: आरूढः सीतास्य विचित्रः। पुत्रस्य: लक्ष्मणस्य: ज्ञानं सीतास्य वह दुष्कर्मन्यन्तं नाटकभक्तं परिव्याप्तम्। तस्य कृपण्डेशः। अतर्उपस्थाप्यन्ते।

बाणभंड: गद्यकाणित्वं चारौवर्त्ययथापि किंचिद् हैति। कादम्बयाः: कथाभागस्य एकं अंशं। शुक्लाशोपदेशस्य: अत्र प्रतिपाद्ययां विषयं। प्रभृतिलाभे युक्तस्य या विचित्रं सम्भवति तद्विषयं शुक्लाशोपसनं कृतं। उपदेशस्य: चुक्तः। केनापि युक्तेन नूनंयां विचित्रोध्येत्यक्तं इति प्रासंगिकता तस्य।

परिच्छेदः - ४ काव्यदर्पणः (पाठः २०-२७)

अध्यायस्य आौौित्यम्

काव्यरचनार्थाऽविज्ञानमस्ति। काव्यनिर्माणे ये नियम अवलम्बनीयाः। काव्याध्ययनेपि ये नियम अवश्य जातव्यां ते सर्वेष्ठ: नियम रीत्यं पद्धतिः। काव्यार्थाः आलोच्यन्ते। तेषु वेचित्राः प्राथ्यात्मित्याः। जातव्याः विषयं अस्मिन् विभवस्य अन्तर्भवन्तिः। अत्यन्तेश्वरस्यमपि तत्त्वं कथयते। अत्र अलकारिकाः परिच्छेदः द्वयते। अलकारः वृत्ति: छन्दः। रस इत्येते मुख्याः कवित्वं अत्र चित्ता: सन्ति।

पाठ्यविषयस्य उदेशः (पाठ्यविषयविन्दवः)

उच्चतरसाहित्यमन्दिराः संस्कृतसाहित्यस्य पुस्तकेऽन्मविषयः अन्तर्भवन्तिः -

<table>
<thead>
<tr>
<th>क्र.सं.</th>
<th>प्रथमः</th>
<th>परिच्छेदः</th>
<th>मुख्यविन्दवः</th>
<th>कविपरिचयः</th>
<th>स्वाध्यायाय होरा:</th>
<th>भाराणशः (अड़कः)</th>
</tr>
</thead>
<tbody>
<tr>
<td>१</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>२४</td>
<td>८</td>
</tr>
</tbody>
</table>

पाठ: - १ कविनां देशाकालकृतिपरिचयः। वाल्मीकि: व्यासः। भासः।
| पाठ: - 2 | कवीनां देशशाकृतिपरिचयः: कालिदास: आरवि: अश्वघोष: |
| पाठ: - 3 | कवीनां देशशाकृतिपरिचयः: श्रीहर्ष: क्षेमेन्द्र: भवभूति: कल्हण: शिवस्वामी |
| पाठ: - 4 | काव्याध्ययनम् - १- |
| पाठ: - 5 | रघुवंशम् (प्रथमसर्गः): रघुवंशीयनृपाणां गुणवर्णनम् (१-१० श्लोकाः) |
| पाठ: - 6 | रघुवंशम् (प्रथमसर्गः): राजो दिलीपस्य गुणवर्णनम् - १ (११-२३ श्लोकाः) |
| पाठ: - 7 | रघुवंशम् (प्रथमसर्गः): राजो दिलीपस्य गुणवर्णनम् - २ (२४-३४ श्लोकाः) |
| पाठ: - 7 | रघुवंशम् (प्रथमसर्गः): विशेषाश्रमं प्रति गमनम् (३५-४८ श्लोकाः) |
| पाठ: - 8 | स्तोत्रसाहित्यम् - - मोहमुद्गर: - अन्वयः व्याख्या, सर्लार्यः: व्याकरणम् |
| पाठ: - 9 | ऐतिहासिकम् अर्धचीनं काव्यम्: - शिवराजविजय: - बुद्धसंवाद: |
| पाठ: - 10 | ऐतिहासिकम् अर्धचीनं काव्यम्: - शिवराजविजय: - योगीराजसंवाद: |
| पाठ: - 11 | ऐतिहासिकम् अर्धचीनं काव्यम्: - शिवराजविजय: - यवनदुराचार: |
| पाठ: - 12 | काव्याध्ययनम् - २- |
| पाठ: - 13 | उत्तरारम्भरितम् (प्रथमोड़कः): श्लोकस्य अन्वयः: अन्वयार्थः: गद्यवाक्यानां सर्लार्यः: प्रयोजने सति व्याकरणार्थौ विशेषार्थौ च |
| पाठ: - 13 | उत्तरारम्भरितम् (प्रथमोड़कः): अष्टावक्रसंवाद: |
| पाठ: - 14 | उत्तरारम्भरितम् (प्रथमोड़कः): चिन्तनार्थम् - १- |
| पाठ: - 15 | उत्तररामचरितम् (प्रथमोडक:) - चिन्दशन्म - २ |
| पाठ: - 16 | कादम्बरी - शुकनासोपदेशा: - यौवनस्वभावा: - गद्यवाच्यानाम्। अन्वयार्थः, सरलार्थः, व्याकरणविवरणी विशेषविवरणी च |
| पाठ: - 17 | कादम्बरी - शुकनासोपदेशा: लक्षमचाचापल्यम्। |
| पाठ: - 18 | कादम्बरी - शुकनासोपदेशा:लक्षमीदुःप्रभावः।१- |
| पाठ: - 19 | कादम्बरी - शुकनासोपदेशा:लक्षमीदुःप्रभावः।२- |
| पाठ: - 20 | अलंकारिकपरमपरापरिचयः - भरतः: भामहः, दण्डी: वाननः, कवितः, अभिनवगुणः, कृतकः: - तेषां दशकलकृत्यः |
| पाठ: - 21 | अलंकारिकपरमपरापरिचयः - आनन्दवर्धनः, अपरमार्थिनः, सममतः, भोजराजः, विश्वनाथः, जगन्नाथः: - तेषां दशकलकृत्यः |
| पाठ: - 22 | वाच्य-लक्ष्य-द्विुक्ष्यानां सामान्यपरिचयः |
| पाठ: - 23 | छन्दोदयः - छन्दसां मात्रागणनात्मकः परिचयः। छन्दोदयः। |
| पाठ: - 24 | छन्दोदयः - मात्रिकिलछन्दांसि, वाणिकिलछन्दांसि च चितानि। - अनुष्टंभुः इदवज्जा वसनात्तितलका मालिनी शाद्विक्रियातिम्। इत्यादिनां केशांविचित्र छन्दसां लक्षणम्, लक्षणस्य व्याख्या, उदाहरणस्य तत्त्वानि केशांविचित्र समान्यः |
| पाठ: - 25 | अलंकारपरिचयः - अर्थांकारः, शब्दांकारः - सामान्यपरिचयः, अलंकारस्य प्रयोजनम्, लक्षणम्, लक्षणस्य बोधनम्, इष्टात्मपुरः:सर्वम् अन्वयः। केचित मुख्यालंकारः। |
| पाठ: - 26 | अलंकारपरिचयः - उपमा, रूपकम्, रचात्त्वः, उत्प्रेक्षा इत्यादिद्विुक्ष्यानां परिचयः। केचित मुख्यालंकारः। |
| पाठ: - 27 | रसपरिचयः - विभावादिनां परिचयः। सरस्वतपुरः:सर्वरसास्तवप्रकारः, रसभेदः। |
Physical Education and Yog

Code No- 373

Introduction

Physical Education and Yog plays an important role in the physical growth and development of an individual. Through Physical Education and Yog, individuals acquire the knowledge, skills, right attitudes and values towards the pursuit of a lifelong physically active and healthy lifestyle. It also provides an avenue for individuals to express themselves through movement and physical activity. In addition, Physical Education and Yog provides a natural platform and valuable opportunities to develop self-management skills, social and co-operative skills, and build character. It serves to complement other educational areas in promoting the desired outcomes of education. In particular, Physical Education and Yog helps to cultivate healthy habits, teamwork, resilience and resolve.

Rationale

Physical Education and Yog are an integral part of the learning process in school education system, they have crucial role in all round development of the student. Physical Education and Yog explains students their health, safety, wellbeing and physical activity participation in context of scientific fields such as physiology, nutrition and psychology etc. Yog is an ancient art that focus on healthy mind in a healthy body. The great saints promote yoga as universal element that enhances the physical, mental, spiritual aspects of human being. Worldwide recognition resulted that United Nations declared 21 June an annual International Yoga Day. As per NCF, 2005 & National Policy on Education 2016 report, yoga is a part of school curriculum. The aim of education system is to build citizen who can contribute in all aspects of life; holistic development of an individual; which cannot be achieve without Yog and Physical Education program at school level. The aim of physical education is to build a healthy citizen through physical activities that may be evaluate during competitions, inter-community sports contests, inter mural competition, special programs at school level etc
Objectives

After completing this course, the learner will be able to:

- appraise the courses in sports, physical education and yog.
- explain the concept of Physical Education and yog.
- describe the origin and various paths of yog.
- broaden the understanding of Physical, Physiological, Psychological, Social and Spiritual aspects of humans.
- provide an in-depth understanding about the aspect of health, diet and nutrition
- enhance the knowledge about health with special reference to lifestyle disorder.
- provide knowledge and skills in Sukshma Vyayama, Assana, Pranayam, Meditation & Physical Fitness Test.
- apprise career aspects in Physical Education, sports and yog
- educate and inculcate ethics and values
- educate the learners with the sports competition and tournament organization.
- educate about various sports injuries and its management.
- promote awareness for health and wellness.
- promote health, safety and physical activities.
- list allied fields of physical education and yog.

Scope and Job Opportunity

This field has a large number of opportunities for employment, some of these are Athletic Coach, Corporate Fitness Instructor, Teacher, Physical Therapist, Personal Trainer, Sports Manager, Health Education Trainer, Sports Journalist, Yoga Instructor or Teacher, Yoga Aerobic Instructor, Yoga Therapist.

Eligibility condition

Age: 15 Years

Qualification: 10th pass

Medium of instruction: English
**Duration of the course:** 1 year

**Weightage**

**Theory:** 70 Marks

**Practical:** 30 Marks

**Tutor Mark Assignment (TMA):** 20% Marks of the theory

**Scheme of studies:** Theory (168 hours), Practical (72 hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 70 marks (3 hours), Practical 30 marks, internal assessment (TMA) - 20% of theory marks (self paced)

**Pass criteria:** 33% marks in each component (Theory and Practical)

**Course Content**

<table>
<thead>
<tr>
<th>S. No</th>
<th>Module/ Topic</th>
<th>Duration (in hours)</th>
<th>Module Approach (Theory)</th>
<th>Description of Practical</th>
<th>Weightage (marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Concept of Physical Education and Yog</td>
<td>24</td>
<td>This module is developed to acquaint learners about the basic concept and historical development of Physical education and Yog. The learner would be able to understand ethical values inculcated through physical education. They will be able to learn about the importance of the wellness and how physical fitness and wellness can be promoted. They will be able to learn various career avenues available in physical education</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Module</td>
<td>Description</td>
<td>Duration</td>
<td>Notes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
<td>----------</td>
<td>-------</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>Dimensions of Physical Education and Yog</td>
<td>33</td>
<td>This module is designed to familiarize the learner about various dimensions of physical education and yog. They will be able to learn how physical education and yog can help to promote physical aspect. The will be able to learn the physiological changes and adaptations. The learner will be able to learn the psychological benefits of physical activities and understand the social values as well understand the spiritual aspects through yog.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>Holistic Health</td>
<td>33</td>
<td>This module is designed to make learner understand the spectrum of health and role of diet and nutrition for promoting health. The will be able to learn complexity of obesity and disease management, awareness about lifestyle disorder. The learner will be able to understand the conceptual framework of the school health program.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4</strong></td>
<td>Physical Education and Sports Sciences</td>
<td>39</td>
<td>This module is developed to aquint learners about the practioners of the physical education program and sports. The learner would be able to</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

269
| 10. Sports Training | understand various sections of population practicing sports. They will be introduced to scientific process of sports training and performance enhancement and procedure the talent and sports performance. They will be able to understand different aspects of organization of completion and tournament. They will be able to understand various injuries associated to sports and its management. |
| 11. Test and Measurement |  |
| 12. Organization of Tournaments |  |
| 13. Athletic Injuries, First Aid and Safety |  |

| 5 Yogic Practices | 39 This module is designed to help learners understand the importance of Yog as unification of physical, mental, intellectual and spiritual aspects of human being through various yogic practices. The learner will learn about Patanjali Ashtang yog as well as various components of Hath yog such as Shatkarma, Asanas, Pranayams, Mudra and Bandh. They will be able to the therapeutic aspects of yogic practices in preventing and curing various diseases. |
| 14. Hatha Yog |  |
| 15. Shatkarma |  |
| 16. Asana* |  |
| 17. Pranayama |  |
| 18. Mudra and Bandha |  |

*Assessed through Tutor Marked Assignment (TMA)
## Practical

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Contents</th>
<th>Marks</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Measurement of Health related Fitness Tests (All the Components)</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>Measurement of Physical and Motor Fitness Test (All the Items)</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>Skills of any Team/ Individual Game</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>Yog Practical-I</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>• Sukshma Vyayama</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Asana (Surya Namaskar, Forward Bending, Backward Bending, Inverted</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Poses, Twisting, Balancing, Standing)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Yog Practical-II</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>• Shatkarma (Jal Neti, Kunjal, Kapal-bhati, Tratak)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Pranayam</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Mudra</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Bandh</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Meditation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Record File &amp; Viva</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>30</td>
<td>72</td>
</tr>
</tbody>
</table>
Military Studies

Code No-374

Introduction

Military Studies is also known by various names like defence and strategic studies, military science, war and national security studies, war and strategic studies etc. Military studies from ancient times, deals with all subjects pertaining to the military and how soldiers and kings are trained in the art of fighting. It can be defined as the study of military organizations, analysis of security threats to a country, the art of warfare and the method of using the armed forces in the defence of the nation.

Rationale

This course can well form the foundation for strategic thinking on security and therefore its importance to students at the school level. At the Senior Secondary level, a child should carry the truthful perception of matters military. The curriculum aims at bridging the gaps in knowledge about the country's military power and distinguishes between the various aspects of providing security to the people and the country. The senior secondary Military Studies course paper will provide knowledge regarding basics of security concepts concerning the defence forces organization, role during war and peace, an insight into India's relations with her neighbors. This course shall also help the student to get a glimpse of the present equipment profile of Indian Armed Forces, their capabilities, futuristic technological developments in the military field including Nuclear, Biological and Chemical (NBC) Warfare.

Objectives

After completing this course, the learner will be able to:

- generate capability and skills, useful in service and for resettlement in civil life.
- examine and incorporate military security concepts, practices in order to improve educational and professional standards.
- gain a holistic idea of military studies as a subject and its application in governance.
- explain the various aspects of military organization, role, tasks undertaken by the armed forces.
- describe India's relationship with her neighbours and its importance.
• explain the basic principles of the technological developments in the military field.

**Scope and Job Opportunity**

This field has a large number of opportunities for employment; some of these are Indian Army Officer, Ground Duty Officer, Indian Defence Officer, Military Officer, Research Officer, Research Associate, Military Intelligence Specialist, and Security Agencies.

**Eligibility condition**

**Age:** 15 Years

**Qualification:** 10th pass

**Medium of instruction:** English

**Duration of the course:** 1 year

**Weightage**

**Theory:** 100 Marks

**Tutor Mark Assignment (TMA):** 20% Marks of the theory

**Scheme of studies:** Theory (240 hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 100 marks (3 hours), internal assessment (TMA) - 20% of theory marks (self paced)

**Pass criteria:** 33% marks in theory
## Course content

<table>
<thead>
<tr>
<th>S. No</th>
<th>Module/Topic</th>
<th>Duration (in hours)</th>
<th>Module Approach/Description</th>
<th>Weightage (marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Military Studies</strong></td>
<td>31</td>
<td>This module is developed to acquaint learners about the basic understanding of the Armed Forces of our country, concept, need and evaluation of military studies.</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>1.  Importance of Military Studies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.  Concept and Evolution of Military Studies*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.  Contemporary Need of Military Studies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td><strong>Structure and Role of the Armed Forces</strong></td>
<td>31</td>
<td>This module is developed to acquaint learners about the organizations structure of the Armed Forces, Special Forces and Para Military forces, their role and structure.</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>4.  Armed Forces</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.  Special Forces*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.  Para Military Forces</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td><strong>Security and Geo-Strategy</strong></td>
<td>34</td>
<td>The module titled Security and Geo-Strategy aims to provide an overview of India's geo-strategic importance, its varied natural resources and economic potentialities. It will help to explain the strategic importance in terms of its geographical location and will further explore the natural and human resource potentials of the country. The module also aims to explain the economic advantages of the resources and will provide an</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>7.  Geo-Strategy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8.  Geo-Politics*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>9.  Maritime Security</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>overview of the strategic relations with neighboring countries. The maritime security problems of India are also highlighted in this module.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Indian Armed forces:</strong> Weapons and War Equipment and Modernization</td>
<td>20</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
|  | 10. Role and Equipment used by the Armed Forces  
11. Modernization of the Indian Armed Forces |  |
|  | The module aims at providing an overview of all the weapons and equipment in use by the Army, Navy and The Air Force. It is intended to give an idea of the weapon system within the purview of public information. |  |
|  | **Warfare and its Types**  
12. Nuclear Warfare  
13. Chemical Warfare*  
14. Biological Warfare*  
15. Cyber Warfare | 20 |
|  | This module is developed to acquaint learners about the potential of Nuclear, Biological and Chemical weapons. The lesson gives an introductory idea of the nuclear reaction, its application as a weapon by the Armed Forces. The effects of an NBC strike and NBC defence are highlighted |  |
|  | **Armed Forces its Role in Internal Security**  
16. Armed Forces in peace keeping  
17. Armed forces in disaster Management  
18. Armed forces in Internal Security | 20 |
|  | This module covers the aspect of peacekeeping operations conducted by UN and our participation and current deployment. The Module also covers the role of armed forces in disaster management and internal security. |  |

*Assessed through Tutor Marked Assignment (TMA)*
Military History
Code No- 375

Introduction
Military history is a humanities discipline within the scope of general history, recording of armed conflict in the history of humanity, and its impact on the societies, their cultures, economies and changing intra and international relationships. The essential subjects of military history study are the causes of war, the social and cultural foundations, military doctrine on each side, the logistics, leadership, technology, strategy, and tactics used, and how these changed over time. A country can take pride in the present and its citizens can seek a glorious future only when they are told about the magnificent past. Citizens need to carry the truthful perception of matters military.

Rationale
Military history is a study about the armed forces of a country, its origin, its transformation over a period of time and changes in the art of warfare and weapons brought about by science and technology. This subject will cover the military aspects of Indian History. Our ancient scriptures describe the importance of military, its composition and the battles and wars that have occurred. The earliest recordings are found in the Rig Veda.
The curriculum aims at bridging the gaps in knowledge about the country's military power and distinguishes between the various aspects of providing security to the people and the country. An understanding of military history becomes a stepping stone to understanding strategy and warfare.

Objectives
After completing this course, the learner will be able to:

• promote an understanding of the necessity of army as a pillar of strength of a nation;
• impart an understanding of why nations go to war, the evolution of armies over the ages and structural changes to its organization, the way battles were fought and the weapons used by the armies;
• enable learners to imbibe the military ethos and explain with examples that bravery and courage are synonymous with army;
• develop the basic knowledge of tactics and strategy, and application of weapons of war;
• assimilate the post independence origin and history of the Indian Army, Navy and Air Force
• discuss participation of Indian troops and battles fought during WW-I and WWII and the wars fought by India post independence.
• impart rudimentary knowledge and thought with contemporary trends of 'Terrorism' and 'Insurgency'.

**Scope and Job Opportunity**

This field has a large number of opportunities for employment; some of these are Indian Army Officer, Indian Defence Officer, Ground Duty Officer, Research Officer, In-service Officer, Military Officer, Military Intelligence Specialist and Lecturer / Professor

**Eligibility condition**

Age: 15 Years

**Qualification:** 10th pass

**Medium of instruction:** English

**Duration of the course:** 1 year

**Weightage**

**Theory:** 100 Marks

**Tutor Mark Assignment (TMA):** 20% Marks of the theory

**Scheme of studies:** Theory (240 hours), TMA (self paced)

**Scheme of evaluation:** Theory paper 100 marks (3 hours), internal assessment (TMA) - 20% of theory marks (self paced)

**Pass criteria:** 33% marks in theory
## Course content

<table>
<thead>
<tr>
<th>S. No</th>
<th>Module/ Topic</th>
<th>Duration (in hours)</th>
<th>Module Approach/Description</th>
<th>Weightage (marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Military History of Ancient India</td>
<td>24</td>
<td>This module is designed to familiarize the learner about warrior system, different types of organization and weapons of armies, importance of flag and Maurya and Gupta armies.</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>1. Warrior System in Ancient India</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Armies in Ancient Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Military Ethos*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Maurya and Gupta Armies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Military History of Medieval India</td>
<td>24</td>
<td>This module is developed to acquaint learners about the impact of foreign invasion during Delhi Sultanate, battles, weapons and military structure and downfall of the mughals.</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>5. Establishment of the Delhi Sultanate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Military System of the Mughals</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Battles of Mughal Army*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. Rise and Fall of the Mughal Empire*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Military History of the Colonial Era</td>
<td>36</td>
<td>This module is designed to familiarize the learner about the establishment of Presidencies, different war and battles, first war of independence and World War –I and</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>9. Colonial Era and the Indian Sepoy*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Battles Fought in the Colonial Era*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Revolt of 1857 and Reforms in the Indian Army</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Indian Army in World War I &amp; II</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 13. Indian Army |
| 14. Indian Navy |
| 15. The Indian Air Force |

| 4 | Armed Forces Today |
| 16. Indo-Pakistan War (1947-48)* |
| 17. Sino-Indian War – 1962 |
| 18. India-Pakistan War - 1965 |
| 19. India - Pakistan War – 1971 |
| 20. Kargil Conflict 1999 |

| 5 | Major Wars Post Independence |
| 48 | This module is designed to familiarize the learner about the reasons of Indo-Pakistan war. The learner will also learn about problem between China and India and Kargil conflict. |

| 6 | Insurgency and Terrorism |
| 21. Insurgency |
| 22. Terrorism |

| 48 | This module is designed to familiarize the learner about causes and consequences of insurgency and terrorism. The learner will also learn about the history of terrorism. |

*Assessed through Tutor Marked Assignment (TMA)
Early Childhood Care and Education  
Code No-376  

Introduction  

It is well established that children grow from the time of conception. It is also believed that their learning starts even before they are born. Current research has repeatedly conveyed that an interactive environment, stimulation, warmth and care are essential for children to grow and learn. Earliest care and experiences affect children’s development and the nature of interactions build a strong orientation towards the way children think. Early Childhood Care and Education (ECCE) provide an opportunity to children to be the best they can be. The course in ECCE at senior secondary level offers learners an opportunity to learn about early development and learning of children.  

Rationale  

ECCE is acknowledged the world over as a significant intervention which aims to help children develop a sound foundation for lifelong learning and development. It is also recognised as the first step in the education ladder which, if done well, prepares children better for primary schooling and promotes school retention and learning. The National Policy on ECCE 2013 has highlighted the significance of ECCE. The policy has slowly emerged from growing awareness and attention on the significance of the early years. Quality ECCE is the issue of ensuring adequate quality in the programme, particularly from the perspective of making it developmentally and age appropriate and child-friendly. This course has been designed to orient learners to the sensitivity required to understand the early learning and developmental needs of young children and how they may vary in different contexts. It also addresses the essential role of nutrition, health and safety of children for holistic development. Learners will learn about appropriate ways necessary to provide a responsive environment to meet the situation-specific as well as stage related needs of children. This programme also aims to prepare learners to value diversity and recognize the significance of inclusive education.
**Objectives**

The course aims at enabling the learners to develop an understanding of:

- early childhood care and education and its significance;
- the rights and developmental needs of children;
- children’s need for nutrition, good health, protection, education and development;
- appropriate methods of care during early years;
- play and stimulation in early childhood;
- interdependence of child development and learning;
- the issues in ECCE and directions to address the issues;
- concept and importance of school readiness and smooth transition;
- language and cultural diversity comprising the Indian social fabric and many co-existing social realities;
- the requirements of an inclusive classroom;
- appropriate interventions to meet the requirements of an inclusive classroom; and
- building meaningful relationships with parents, community and other stakeholders for an effective ECCE programme.

**Scope and Job Opportunity:**

- **Caretaker:** Caretaker in an ECCE centre helps ECCE teacher in planning and managing for children.
- **Babysitting:** The learners may opt for the profile of babysitting.
- **Entrepreneur:** The learner may start her/his own startup in early childhood education.
- **Higher Studies:** After completing the course, the learner may opt for higher studies in ECCE.

**Eligibility Conditions**

**Age:** 15 Years

**Qualification:** 10\(^{th}\) pass

**Medium of instruction:** English

**Duration of the course:** One year
Weightage

**Theory:** 80 Marks

**Practical:** 20 Marks

**Tutor Mark Assignment (TMA):** 20% weightage of theory marks

**Scheme of Evaluation:** Theory paper 80 Marks (3 hours), Practical 20 Marks, internal assessment (TMA) - 20% weightage of theory marks (self paced)

**Pass criteria:** 33% marks in each component (Theory and Practical)

### Course Content:
#### Module (Topics):

<table>
<thead>
<tr>
<th>S. No</th>
<th>Module</th>
<th>Duration (in hours)</th>
<th>Module Approach/Description</th>
<th>Description of Practical</th>
<th>Weightage (Marks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Early Childhood Care and Education</strong></td>
<td>50</td>
<td>This module aims at providing fundamental knowledge about the ECCE, significance of ECCE, essential components of ECCE focussing on how the relevance and awareness have evolved in both the Indian and global context. The learners will also learn about factors influencing childhood in India, necessity for attention on nutrition and health and the needs and rights of young children. Brief discussions on important government initiatives/schemes and policies for ECCE will appraise learners about the role of the state and civil society. Issues and concerns related to ECCE are addressed to build awareness and interest of the learners.</td>
<td>The practicum activities are divided into five categories: A. Observation B. Family Practices C. School Records D. Infrastructure and Facilities of an ECCE Centre E. ECCE Staff and Programme.</td>
<td>20</td>
</tr>
</tbody>
</table>
The module discusses different aspects of child development to provide a comprehensive understanding of development during the early years. Domains of development and developmental milestones have been elaborated to inform learners about nature of growth and development. Stages of development are organised into two lessons—prenatal to three years, and three to eight years, to highlight appropriate areas of emphasis during different stages. The module provides learners an understanding of the developmental characteristics of young children.

**Observation**

1) Design a format to record the observations of children. Observe a child/children in your neighborhood/family for 20 minutes in the settings listed below. Prepare a report of your observations in 150 words.

- Infant of five months: Observe the milestones achieved.
- Toddlers at outdoor play: Comment on the interaction of the toddler with other children and the type of play indulged in.
- Five year old child at indoor play: Comment on the interaction and type of play indulged in.

**Family Practices**

1) Design a questionnaire to be used to interview parents of a toddler regarding development in any one domain.
<table>
<thead>
<tr>
<th></th>
<th><strong>Curriculum, Practices and Progress</strong></th>
<th>65</th>
<th><strong>Family Practices</strong></th>
<th>25</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10. Care of Children in Early Years</td>
<td></td>
<td>2) Prepare a list of eight to 10 questions to gather information of family practices with regard to: (a) Feeding practices of infants and toddlers (b) Childcare routines and practices of children in the age group of four to five years</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11. Play and Early Learning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12. Planning Developmentally Appropriate ECCE Curriculum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13. How Children Learn (Early Learning and Teaching)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>14. Methods of Child Study*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>ECCE Staff and Programme</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2) Design a three hour ECCE programme to be followed in a preschool after visiting and studying the same in the neighbourhood preschool.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>School Records</strong></td>
<td>10</td>
<td>1) Visit the neighbourhood ECCE centre and study the children’s</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>Organisation and Management of ECCE Centre</strong></th>
<th>45</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15. Profile of an ECCE Centre *</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16. Administration and Management of an ECCE</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This module focuses on dealing with children in orienting learners to interpersonal dealings to foster growth and development. The module also learners with specific needs of babies when they are in group care. Creating a responsive environment for children in group settings requires special features to address the individual child in a collective. Such interactions are usually based on a curriculum, principles of pedagogy or practices to review progress. These dimensions are critical for providing quality in childcare with emphasis on stimulation, warmth and sensory inputs in the first two years. This evolves into play and learning essential for early childhood education. The module elaborates on understanding methods that enhance learners’ understanding of how children learn using child-friendly techniques such as play, art, music and movement. Learners will also learn methods of child study to note progress and developmental advances.
<table>
<thead>
<tr>
<th>Centre</th>
</tr>
</thead>
<tbody>
<tr>
<td>17. Qualities and Roles of an ECCE Teacher</td>
</tr>
<tr>
<td>18. Involvement of Parents and Community</td>
</tr>
<tr>
<td>19. Smooth Transition</td>
</tr>
</tbody>
</table>

principles of administration and management for proper running of the centre. Qualities of a good ECCE teacher, significance and ways of involving the parents and community members have also been elaborated in the module to build a comprehensive knowledge of the requirements in an ECCE centre.

and teacher’s records maintained by them. Write a report of 150 words on your observation.

2) Design the following records based on your observation during the above visit:
- Child’s cumulative record/Child’s profile record
- Child’s admission record
- Child’s portfolio

**Infrastructure and Facilities in an ECCE Centre**

1) Design an assessment sheet for easy and quick assessment of requisite infrastructure of an ECCE Centre. Using this format, visit the neighbourhood ECCE centre and assess the following:
- Space Management
  - Outdoor play equipment
- Indoor play equipment
- Water and toilet facilities
- Air, light and ventilation

**ECCE Staff and Programme**

1) Draw up a set of questions to be asked during the selection
### 5. Diversity and Inclusion

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th>interview of the following staff: Teacher Centre In-charge Centre Helper</th>
</tr>
</thead>
<tbody>
<tr>
<td>20. Understanding Diversity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Inclusion: Concept and Practice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Early Identification and Intervention</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Diversity is embedded in the fabric of our society with multiple languages, religions and the geographical variation shaping everyday lives according to the ecology. The wide range of economic situations of families impacts access to resources. This module provides awareness regarding the presence of features of social differences as well as differences in ability, with a focus on issues and strategies to address diversity in the classroom. The module also describes the concept of inclusion and inclusive classroom practices for promoting inclusion.

*Assessed through Tutor Marked Assignment (TMA)*
Committees of Courses

HINDI
Chairperson
Prof. Namvar Singh
Professor Emeritus, Centre for Indian Languages, SLL&CS, JNU, New Delhi

Members
Prof. Ashok Priyadarshi
(Retd.) Dept. of Hindi, Ranchi University
Dr. Pushplata Srivastav
(Retd.) Reader, Teacher Education Dept. Jamia Milia Islamia, New Delhi
Mr. Suryanath Singh
Editorial division ‘Jansatta’.

ENGLISH
Chairperson
Prof. R. K. Dixit
HOD, DESSH, NCERT, New Delhi

Members
Prof. S. K. Ram
(Retd.) NCERT, New Delhi
Dr. Kamal Bhasin
Reader, ARSD College, New Delhi
Mrs. Usha Ram
Principal, LP School, New Delhi
Sh. Swaesh Sharma
Lecturer, PGDAV College, New Delhi
Prof. Pushpa Ramakrishna
Dean, Faculty of Arts Deptt. B. R. Ambedkar Open University, Hyderabad
Prof. Paul Gunasekhar
HOD, Materials Production CIEFL, Hyderabad
Prof. MamtA Agrawal
DTTEE, NCERT, New Delhi

URDU
Chairperson
Prof. Gopichand Narang
Director Sahitya Akademy, Mandi House, New Delhi

Members
Dr. Khalid Mahmood
Dept. of Urdu, Jamia Milia Islamia, New Delhi
Dr. Jameel Akhtar
General Sec. International Urdu Foundation Munirka, New Delhi
Ms. Khalida Zahidi
Headmistress, Govt. High School, Delhi
Ms. Ayesha Khatoon
Senior Teacher, Jamia Senior Secondary School, Jamia, New Delhi
Dr. Waseem Begum
Asst. Regional Director, Maulana Azad National Urdu University New Delhi
Dr. Maula Bakhsh
Dept. of Urdu, Dyal Singh College, University of Delhi, New Delhi
Dr. Shoaib Raza Khan
Academic Officer (Urdu), NIOS

Dr. Dr. Waseem Begum
Asst. Regional Director, Maulana Azad
National Urdu University New Delhi

Dr. Indrasen Sharma
(Retd.) Reader, NCERT, New Delhi
Dr. Rachna Bhatia
Assistant Director (Academic), NIOS

Dr. Dr. Waseem Begum
Asst. Regional Director, Maulana Azad
National Urdu University New Delhi

Dr. Indrasen Sharma
(Retd.) Reader, NCERT, New Delhi
Dr. Rachna Bhatia
Assistant Director (Academic), NIOS
SANSKRIT
Chairperson
Prof. Vachaspati Upadhyaya
Vice-Chancellor, Lal Bhadur Shashtri Rashtriya Sanskrit Vidyapeeth, New Delhi

Members
Prof. Manik Govind Chaturvedi, Professor (Retd.), NCERT, New Delhi
Dr. Suresh Pant
Senior Lecturer (Retd.) Government Sr. Secondary School, New Delhi
Dr. Sudarshan Kaushik
Reader (Retd.), Daulatram College University of Delhi, New Delhi
Dr. Shubhankar Mishra
Assistant Research Officer, Kendriya Hindi Nideshalaya, New Delhi
Ms. Shashi Prabha Goyal
Reader (Retd.), SCERT, New Delhi
Dr. Chamu Krishana Shastri
Sanskrit Bharti, New Delhi
Dr. Rajeev Kumar Mishra
Senior Teacher (Sanskrit) Kendriya Vidyalay, New Delhi

MATHEMATICS
Chairperson
Prof. G. Ravindra
Director (Retd.) NCERT, New Delhi

Members
Prof. Mohan Lal
Principal (Retd.) PG DAV College, Nehru Nagar, New Delhi
Prof. D. P. Shukla
Dept. of Mathematics, University of Lucknow, Lucknow
Prof. C. P. S. Chauhan
Dept. of Education AMU, Aligarh
Sh. J. C. Nijhawan
Vice Principal (Retd.) Govt. Sr. Sec. School Keshav Puram, New Delhi
Prof. Arun Kapur
Professor (Retd.) Dept. of Mathematics Jamia Milia Islamia University, New Delhi
Prof. V. P. Gupta
Dept. of Measurement & Evaluation, NCERT, New Delhi
Sh. G. D. Dhall
Reader (Retd.), NCERT, New Delhi
Dr. Rajendra Kumar Nayak
Academic Officer (Mathematics) NIOS

PHYSICS
Chairperson
Prof. C. K. Ghosh
Director, NCIDE, IGNOU, New Delhi

Members
Sh. Puran Chand
Former Joint Commissioner, KVS Joint Secretary, COBSE, New Delhi
Sh. R. P. Sharma
Education Officer (Retd.) CBSE, New Delhi
Dr. P. K. Mukherjee
Associate Professor (Physics), Desh Bandhu College, New Delhi
Sh. Jayavir Singh
PGT (Physics), Holy Cross School, Najafgarh, New Delhi
Prof. R. R. Yadav
Department of Physics, University of Allahabad, Allahabad
Prof. V. P. Srivastava
Retd Professor (Physics), DESM, NCERT, New Delhi
Prof. B. K. Sharma
Retd. Professor (Physics), DESM, NCERT, New Delhi
Sh. Kanhaiya Lal
Principal (Retd.), Direc. of Education, New Delhi
Late Sh. Sher Singh
Principal, Navyug School, Lodhi Road, New Delhi
Dr. K. B. Thapa
Assistant Professor, UIET, CSJM University, Kanpur
Prof. A. K. Jha
Department of Physics, College of Commerce, Patna
Prof. Balak Das
Department of Physics, University of Lucknow, Lucknow
Dr. Alok Kumar Gupta
Academic Officer (Physics), NIOS
### CHEMISTRY

**Chairperson**  
Prof. A. K. Sharma  
Former Director, NCERT, New Delhi

**Members**

- Prof. N. K. Jha  
  Retd. Professor IIT, New Delhi
- Dr. K. C. Trikha  
  Reader, ARSD college, Dhaula Kuan, New Delhi
- Dr. V. P. Singh  
  Principal, DIET SCERT, New Delhi
- Dr. Sulekh Chandra  
  Associate Professor, Zakir Hussain Delhi College University of Delhi, New Delhi
- Sh. K. C. Saxena  
  Vice-Principal Govt. Sarvodaya Vidyalaya, New Delhi
- Dr. Ashok Kumar Sharma  
  Lecture (Chemistry) Govt. Boys’s Sr. School No. 1, C- Block, Yamuna Vihar, New Delhi
- Prof. B.S. Saraswat  
  School of Sciences IGNOU, New Delhi
- Prof. Sunita Malhotra  
  School of Sciences IGNOU, New Delhi
- Dr. Vijay Sarda  
  Associate Professor, Zakir Hussain Delhi College, New Delhi
- Dr. Vinod Kumar  
  Associate Professor, Hansraj College, New Delhi
- Ms. Vinita Sharma  
  PGT, Chemistry Kendriya Vidyalaya No. 3, Railway Colony, Mathura
- Dr. Rajeev Prasad  
  Academic Officer (Chemistry) NIOS

### BIOLOGY

**Chairperson**  
Prof. Keshav Trehan  
Deptt. of Botany, Kurukshetra University, Kurukshetra

**Members**

- Dr. H. S. Vishnoi  
  Retd. Reader (Zoology), Delhi University, Delhi
- Mrs Durga Jodhani  
  Retd. Vice Principal, Central School No.3, NH-41 Faridabad
- Prof. Tasneem Fatima  
  Deptt. of Botany, Jamia Millia Islamia, New Delhi
- Dr. Meenakshi Arya  
  Retd. Reader (Botany), Kanodia Kanya Mahavidyalaya, Jaipur
- Ms. Neelam Gupta  
  Executive Officer NIOS, New Delhi
- Dr. Jasvant Sokhi  
  Reader in Life Sciences, School of Sciences, IGNOU, Garhi, New Delhi
- Dr. Bharati Sarkar  
  Retd. Reader (Zoology), Maitreyi College, Delhi
- Mrs. Shivani Goswami  
  Ex-HOD (Biology), Mother International School, New Delhi
- Dr. Rita Singh  
  Deptt. of Botany, GGB Singh Indraprastha University, Delhi
- Dr. Sanghmitra Suryapani  
  Academic Officer (Biology) NIOS, NOIDA

### HISTORY

**Chairperson**  
Prof. T. K. V. Subramaniam  
Head, Dept. of History, University of Delhi, Delhi

**Members**

- Prof. J. K. Sharma  
  Punjab University, Chandigarh
- Dr. B. R. Mani  
  Deputy Director, ASI, New Delhi
- Ms. Padma Srinivasan  
  PGT, DPS, R. K Puram, New Delhi
- Dr. Gurpreet Maini  
  Punjab Education Service, New Delhi
- Prof. A. R. Khan  
  Professor of History, IGNOU, New Delhi
- Dr. P. K. Basant  
  Asso. Professor, Dept. of History, Jamia Millia Islamia, New Delhi
- Ms. Manjistha Bose  
  Retd. PGT and HOD Social Science Springdales School, Pusa Road, New Delhi
- Ms. Anita Devraj  
  Principal, DAV Public School, Bahadurgarh, Haryana
- Dr. Anita Priyadarshini  
  Director (Academic), NIOS
POLITICAL SCIENCE
Chairperson
Prof. C. S. R. Murthy
CIPOD, School of International Studies, JNU, New Delhi.

Members
Prof. D. S. Muley
(Retd.) NCERT, New Delhi
Prof. Alok Pant
Dept. of Political Science, Allahabad University, Allahabad (U.P.)
Mr. R. S. Pasricha
(Retd.) Vice-Principal D.A.V. School, Green Park, New Delhi
Prof. D. S. Muley
(Retd.) NCERT, New Delhi
Mr. V. N. Khanna
(Retd.) Reader Deshbandhu College University of Delhi, New Delhi
Dr. R. P. Singh
Reader Allahabad Degree College Allahabad University, Allahabad (U.P.)

GEOGRAPHY
Chairperson
Prof. S. K. Aggarwal
Former Head, Department of Geography, Delhi School of Economics, Delhi University, Delhi

Members
Dr. Kanchan Singh
Former Associate Professor, Meerut College, Meerut
Dr. D. S. Yadav
Former Principal, Govt. of Delhi, New Delhi
Dr. Ramashraya Prasad
Associate Professor, Bhim Rao Ambedkar College DU, New Delhi
Sh. S. K. Sharma
PGT, K.V. Shalimar Bagh, New Delhi
Mrs. Kamla Menon
Former Principal, Mirambika School, New Delhi
Dr. Subhkant Mohapatra
Associate Professor SOS, IGNOU, New Delhi
Dr. R. K. Shrivastava
Senior Lecturer, SCERT, New Delhi

ECONOMICS
Chairperson
Dr. O. P. Agarwal
Former Director of Economic Department, NREC College, Meerut University, Meerut

Members
Sh. J. Khuntia
Associate Professor, School of Open Learning University of Delhi, New Delhi
Prof. Renu Jatana
Associate Professor, MLSU, Udaipur, Rajasthan
Sh. A. S. Garg
(Retd.) Vice Principal, NCT, New Delhi
Dr. Padma Suresh
Associate Professor, Sri Venkateshwara College University of Delhi, Delhi
Sh. H. K. Gupta
PGT, NCT, New Delhi
Sh. Ramesh Chandra
(Retd.) Reader (Economics) NCERT, New Delhi
Dr. Manish Chugh
Academic Officer (Economics) NIOS
BUSINESS STUDIES
Chairperson
Dr. O. P. Agarwal
Former Director of Economic Department,
NREC College, Meerut University, Meerut

Members
Sh. J. Khuntia
Associate Professor (Economics)
School of Open Learning,
University of Delhi, New Delhi

Prof. Renu Jatana
Associate Professor, MLSU, Udaipur,
Rajasthan

Sh. A. S. Garg
(Retd.) Vice Principal, NCT, New Delhi

Dr. Padma Suresh
Associate Professor (Economics)
Sri Venkateshwara College,
University of Delhi, New Delhi

Sh. H. K. Gupta (Retd.)
PGT, NCT, New Delhi

Sh. Ramesh Chandra
(Retd.) Reader, NCERT,
New Delhi

Dr. Manish Chugh
Academic Officer (Economics) NIOS

ACCOUNTANCY
Chairperson
Prof. Jawahar Lal
Deptt. Of Commerce,
Delhi School of Economics, New Delhi

Members
Dr. Shipra Vaidya
Department of Social Sciences &
Humanities, NCERT, New Delhi

Dr. H. V. Jhamb
Reader, Dept. Of Commerce,
Khalsa College, New Delhi

Ms. Meena Goel
Principal, Navhind Girls Sr. Sec. School,
New Rohtak Road, New Delhi

Dr. A. K. Sahajpal
Reader, Dept. of Correspondence,
Panjab University, Sector-14,
Chandigarh

Dr. Jagmohan Gupta
Reader, Dept. of Commerce,
Moti Lal Nehru College, New Delhi

Sh. S. K. Bansal
(Retd.) Lecturer, Commercial Sr. Sec.
School Daryaganj, New Delhi

Dr. Piyush Prasad
Academic Officer (Accountancy)
NIOS

HOME SCIENCE
Chairperson
Dr. S. Roy
Professor and Head, DEE, College of Home
Science, PAU, Ludhiana

Members
Dr. Amita Amte
Former Lecturer, HE, New Delhi

Mrs. Veena Kapur
Reader (Retired) Deptt. of Textiles
and Clothing, Lady Irwin College,
New Delhi

Dr. (Mrs.) P. Seetharaman
Reader (Retired)
Department of Community Resource
Management, IHE, New Delhi

Dr. Sumita Katyal
PGT, Home Science, Govt. SKV,
New Delhi

Dr. Amarjeet Kaur
Head H.Sc. Deptt. GCG, Chandigarh

Ms. Aparna Khanna
Lecturer, Department of Community
Resource Management, Lady Irwin
College, New Delhi

Dr. Anita Singh
Senior Lecturer, Department of Food
and Nutrition, AK PG College,
Varanasi

Mrs. Asheema Singh
AEP, Project Coordinator, NIOS

Dr. Sandhya Kumar
Deputy Director, NIOS
PSYCHOLOGY

Chairperson
Prof. Girishwar Misra (Retd.)
Department of Psychology,
University of Delhi, Delhi

Members
Prof. Asha Bhatnagar
(Retd.) NCERT, New Delhi
Prof. K. D. Broota
(Retd.) Department of Psychology,
Delhi University, New Delhi
Dr. Akbar Husain
Dept. of Psychology,
Aligarh Muslim University, Aligarh
Dr. Ashok Kumar
Jaipur
Dr. Mahesh Prasad Sharma
Principal, Saraswati Bal Mandir,
NOIDA
Prof. A. K. Mohanty
Zakir Husain Centre, JNU,
New Delhi
Dr. K. K. Jain
(Retd.) Reader, New Delhi
Dr. K. N. Tripathi
Barkatullah University, Bhopal (M.P)
Ms. Pratibha Sharma
Principal, DIET, New Delhi

PAINTING

Chairperson
Dr. Daljeet
Curator, National Museum, New Delhi

Members
Mr. K. Khan
Retd. Principal, Govt. Sr. Secondary
School, Seemapuri, New Delhi
Mr. K. K. Kashyap
Director Bharati Vikash Manch,
Darbhanga (Bihar)
Mr. D. Apte
Graphic Artist, India Trade Promotion
Organization, New Delhi
Mrs. Niti Sethi Bose
Freelancer, Painter, New Delhi
Dr. Kamlesh Dutt Pandey
Head of the Department, MMN Post
Graduate College, Ghaziabad (U.P.)
Dr. G. P. Bagoria
Officer on Special Duty Exam Cell,
Directorate of Education, New Delhi
Mr. Prayag Shukla
Editor/Art Critic, Ranga Prasanga
Magazine, New Delhi
Mr. K. A. Subbanna
Sr. Drawing Teacher, Delhi Kannada
Sr. Sec. School, New Delhi
Mr. Goutam Mondal
Teacher, St. Mark School,
Janak Puri, New Delhi
Mr. M. Barua
P.G.T. Lecturer, Raisina Bengali School,
New Delhi
Mr. J. D. Virmani
(Retd.) Reader in Art Education,
NCERT, New Delhi
Mr. G. N. Saran
Principal, G.B.S.S.School (Morning)
Lalita Park, New Delhi
Ms. Sanchita Bhattacharjee
SEO, NIOS

COMPUTER SCIENCE

Chairperson
Dr. M. P. Goel
Principal, Systems Analyst, National
Informatics Centre (NIC), New Delhi

Members
Dr. A. K. Saini
FMS, University of Delhi, New Delhi
Mr. C. D. Sharma
Education Officer, CBSE, New Delhi
Ms. Shashi Bhushan
Reader, Computer Science,
IGNOU, New Delhi
Dr. Kuldeep Agarwal
Director (Academic) NIOS
Mr. S. K. Prasad
System Analyst and Programmer,
NIOS
Ms. Koushalya Barik
Assistant Director
(Vocational Education) NIOS
**SOCIOMETRY**

**Chairperson**
Prof. Sachchindananda
Chairman, A.N. Sinha Institute, Patna, Bihar

**Members**
Prof. D. Sunderam
Retd. Professor & H.O.D.
University of Madras, Chennai

Prof. Rajeshwar Prasad
Retd. Director, Indian Social Science Association, Agra

Prof. A. B. Saran
Retd. Professor & H.O.D.
Ranchi University Ranchi, Jharkhand

Dr. S. Prasad
Retd. From NCERT, New Delhi

Prof. S. N. Radha
Retd. H.O.D. Sambalpur University

Prof. M. N. Karna
H.O.D. Sociology, NEHU University, Shillong

Prof. V. S. Upadhyay
Retd. Professor & Head Ranchi University Ranchi, Jharkhand

Dr. Manju Bhatt
DESSH, NCERT, New Delhi

Mrs. Priti Srivastava
Executive Officer, NIOS

---

**ENVIRONMENTAL SCIENCE**

**Chairperson**
Prof. C. K. Varshney
Retd. Professor, School of Environmental Sciences, JNU, New Delhi

**Members**
Prof. T. R. Rao
School of Environmental Sciences, University of Delhi, New Delhi

Dr. S. M. Nair
Programme Director, Centre of Environmental Education, Swaami Nagar, New Delhi

Prof. Geeta Kaicker
School of Sciences, IGNOU, New Delhi

Dr. Yash P Abrol
Department of Environmental Botany, Hamdard University, New Delhi

Dr. B. S. Attri
Retd. Advisor (Environment)
Ministry of Environment & forest, Govt of India, New Delhi

Mr. Srikantha Panigrahi
Consultant, Environment & Forest Division Planning Commission, Yojna Bhawan Parliament Street, New Delhi

Ms. Neelam Gupta
SEO, NIOS

---

**MASS COMMUNICATION**

**Chairperson**
Prof. N R Mohanty
Director, JIIMC, F-33, Sec-6, NOIDA

**Members**
Prof. C. P. Singh
Dean, Department of Mass Communication, GGSIP University, Dwarka, New Delhi

Ms. Biraj Swain
Consulting Editor, News laundry & Development Communication

Sh. K. G. Suresh
Director General, IIMC, New Delhi

Prof. J. S. Yadav
Former Director General, IIMC, New Delhi

Prof. Parvaiz Alam
(Former BBC Journalist) Dean, School of Journalism and Mass Comm. Apeejay Satya University, Gurgaon, Haryana

Sh. Rajesh Priyadarshi
Digital Editor, BBC

Sh. Indra Jit Singh
Course Coordinator, NIOS
DATA ENTRY OPERATIONS

Chairperson
Prof. A. K. Saini
Professor (Information Technology)
University School of Management Studies,
GGS Indraprastha University, New Delhi

Members
Prof. Kamlesh Mittal
(Retd.) DCETA, NCERT, New Delhi

Mr. Purnedhu Hota
Senior Manager, NIIT Ltd., New Delhi

Ms. Vibha
Assistant Professor, Deptt. of Computer Science & Engineering, Indira Gandhi Institute of Technology, New Delhi

Dr. M. P. Goel
(Retd.) Principal, Systems Analyst, NIC, New Delhi

Ms. Madhavi Sharma
Deputy Director, Computer Division, IGNOU, New Delhi

Ms. Sangeeta Chaturvedi
Coordinator, AISECT, New Delhi

Mr. S. K. Prasad
System Analyst and Programmer, NIOS

Ms. Koushalya Barik
Assistant Director (Vocational Education) NIOS

INTRODUCTION TO LAW

Chairperson
Prof. Jayadev Pati
SNIL, SOA University, Bhubaneswar, Odisha

Members
Prof. V. G. Ajjappa
Retd. Professor, Karnataka University, Dharwad, Karnataka

Professor. Ajit Mittal
Professor, Amity Law and Business School, NOIDA

Mr. Devraj Singh
Lawyer, High Court, Delhi

Prof. Sri Krishna Deva Rao
Vice-Chancellor
National Law University, Odisha

Mr. Manwendra Kumar Tiwari
Assistant Professor (Law) Hidayatullah, National Law University, Raipur

Dr. Sushila
Assistant Professor
National Law University, Delhi

Dr. Manish Chugh
Academic Officer (Economics)
NIOS, NOIDA

Dr. Chunnu Prasad
Academic Officer (Political Science)
NIOS, NOIDA

Dr. Sukanta K. Mahapatra
Academic Officer (Sociology)
NIOS, NOIDA

LIBRARY AND INFORMATION SCIENCE

Chairperson
Ms. C. M. Anand
Scientist F (Retd.) CSIR-NISCAIR, New Delhi

Members
Prof. Jaideep Sharma
Faculty of Library and Information Science, IGNOU, New Delhi

Dr. Bullu Maharana
Associate Professor, Sambhalpur University, Odisha

Dr. Indra Kaul
Deputy Director, ICSSR, New Delhi

Dr. B. N. Singh
Library and Information Officer, CBSE, New Delhi

Dr. R. Sevukan
Associate Professor, Faculty of Library and Information Science, Pondicherry University

Dr. S. R. Gupta
(Retd.) Associate Professor, University of Delhi, New Delhi

Dr. M. Madhusudhan
Asstt. Professor, University of Delhi, New Delhi

Sh. K. N. Jha
Lecturer, Meerabai Polytechnic, New Delhi

Mr. Naipal Singh
Librarian, NIOS
### TOURISM

**Chairperson**

Prof. Syed Inayet Ali Zaidi  
Jamia Millia Islamia  
New Delhi

**Members**

Dr. Abdul Gani  
Registrar, Kashmir University  
Srinagar

Prof. Sampad Swain  
Head Department of Tourism  
Hospitality & Hotel Management  
Indira Gandhi National Tribal Delhi University, Amarkantha

Sh. Vipul Singh  
Associate professor  
Motilal Nehru College  
University of Delhi

Father Babu Joseph  
Head  
Dept. of History and Tourism  
Salesian College, Sonada  
Darjeeling, West Bengal

H.K. Bhutani  
Executive Manager  
Ashoka Hotel  
ITDC New Delhi

Dr. Azmat Noori  
Academic Officer(History)  
NIOS, NOIDA (UP)

Dr. Saumya Rajan  
Academic Officer(English)  
NIOS, NOIDA (UP)

### ARABIC

**Chairperson**

Prof. Shafiq Ahmad Khan  
UGC Emeritus Fellow, Department of Arabic, Jamia Millia Islamia, New Delhi.

**Members**

Prof. Syed Kafeel Ahmad Qasmi  
Professor of Arabic and Dean Faculty of Humanities, Aligarh Muslim University, Aligarh.

Prof. Mohammad Iqbal Hussain  
Dean, School of Arab Studies and Head, Department of Arabic, EFL University, Hyderabad.

Prof. Wali Akhtar  
Department of Arabic, University of Delhi.

Prof. Rizwanur Rahman  
Centre of Arabic and African Studies, Jawahalal Nehru University, New Delhi.

Dr. Md. Qutbuddin  
Associate Professor, Centre of Arabic and African Studies, Jawahalal Nehru University, New Delhi.

Dr. Haifa Shakri  
Assistant Professor, Department of Arabic, Jamia Millia Islamia, New Delhi.

Dr. Shamsuddin Nadvi  
Teacher of Arabic Language, Madarsa Talimul Quran, Bhopal.

Dr. Mujeeb Akhtar  
Assistant Professor, Department of Arabic, University of Delhi, Delhi

Dr Shoib Raza Khan  
Co-ordinator, Academic Officer (Urdu), National Institute of Open Schooling, NOIDA.
### PERSIAN

**Chairperson**

Professor Iraq Raza Zaidi  
Professor and Head, Department of Persian,  
Jamia Millia Islamia, New Delhi

**Members**

- **Dr. H. Haider**  
  Regional Director  
  Maulana Azad National Urdu University,  
  Patna, Bihar

- **Professor Mohd. Iqbal**  
  Department of Persian,  
  Jamia Millia Islamia, New Delhi

- **Dr. Tanveer Khudnumai**  
  Department of Persian,  
  Osmania University, Hyderabad, A.P.

- **Professor Aleem Ashraf**  
  Department of Persian,  
  Delhi University, Delhi

- **Mr. A. H. Kazmi**  
  Lecturer, Department of Persian,  
  Anglo Arabic Sr. Sec. School  
  Ajmeri Gate, Delhi

- **Dr. Nakhat Fatima**  
  Asstt. Professor, Department of Persian  
  MANUU Campus, Lucknow

- **Dr. Asad Ali Khursheed**  
  Asstt. Professor, Department of Persian  
  Kashmir University, Kashmir

- **Mr. Mohd. Tayyab**  
  Lecturer, Department of Persian,  
  Anglo Arabic Sr. Sec. School Ajmeri Gate, Delhi

- **Dr. Shuaib Raza Khan**  
  Asstt. Director, National Institute of Open Schooling,  
  NOIDA, U.P.

### MALAYALAM

**Chairperson**

Prof. K.P Sankaran  
Retd. Reader,  
Regional Institute of Education (RIE)  
NCERT, Mysore

**Members**

- **Dr. B.V Sasikumar**  
  Reader, Dept. of Malayalam,  
  University of Kerala

- **Dr. P. Sathyanesan**  
  Assistant Professor (Retd.),  
  SCERT, Thrivananthapuram

- **Dr. P. Basheer**  
  Former Research Officer,  
  SCERT, Thrivananthapuram

- **Dr. P. KThilak**  
  Research Officer,  
  SCERT, Thrivananthapuram

- **Sh. Kadangot Prabhakaran**  
  Writer, ‘Tejas’, P.K Road,  
  Chunkamvazhi, Ayyanthol, Thrissur

- **Sh. Manikanda Das K.V**  
  Principal, Chattanchall HSS,  
  Thekkil, Kasargode

- **Sh. T.K Ummer**  
  Retd.HSST,  
  KPR Gopalan Smaraka GHSS,  
  Thaliparambu, Kannur
# Veda Adhyayan

**Chairperson**

Dr. K E Devanathan  
Vice-Chancellor, Sri Venkateswara Vedic University, Chandragiri by-pass Road Alipiri, Tirupati, Andhra Pradesh

**Members**

**Prof. Ram Nath Jha**  
Professor, Special Center for Sanskrit Studies, Jawaharlal Nehru University, New Delhi

**Dr. Santosh Kumar Shukla**  
Professor, Special Center for Sanskrit Studies, Jawaharlal Nehru University, New Delhi

**Swami Vedatatwananda**  
Principal, Vivekananda Veda Vidyalaya, Belur Math, Howrah

**Dr. Ram Narayan Meena**  
Assistant Director (Academic), Academic Department, NIOS

**Dr. Dilip Panda**  
Hiralal Mazumder Memorial College for Women, Jadanath Sarbhohum Ln, near Kali Temple, College Para, Dakshineswar, Kolkata, West Bengal

**Sh. Sant Kumar Pan**  
Asstist. Professor, Bijoy Narayan Mahavidyalaya, Itachuna, Hooghly West Bengal

**Acharya Pradhyuman ji**  
Acharya, Vaidic Gurukulam, Patanjali Yogapeeth, Haridwar (Uttarakhand)

**Acharya Phool Chand ji**  
Acharya, Vaidic Gurukulam, Patanjali Yogapeeth, Haridwar (Uttarakhand)

---

# Sanskrit Vyakaran

**Chairperson**

Prof. (Dr.) Ark Nath Chaudhary  
Vice-Chancellor, Shree Somnath Sanskrit University, Rajendra Bhuvan, Veraval, Dist- Gir Somnath (Gujarat)

**Members**

**Dr. Neeraj Kumar Bhargave**  
Assistant Professor, Ramakrishna Mission Vivekananda University, Belur Math, Howrah

**Swami Vedatatwananda**  
Principal, Vivekananda Veda Vidyalaya, Belur Math, Howrah

**Dr. Hari Ram Mishra**  
Assistant Professor, Special Center for Sanskrit Studies, JNU, New Delhi

**Dr. Ram Narayan Meena**  
Assistant Director (Academic), Academic Department, NIOS

**Sh. Malay Porey**  
Assistant Professor, Government General Degree College, Ranibandh, Rautora, Bankura, West Bengal -722 135

**Sh. Sumanta Chowdhury**  
Assistant Professor, Sabang Sajani Kanta Mahavidyalaya, Temathani - Bene Dighi Road, Lutunia, (West Bengal)

**Sh. Vijender Singh**  
Senior Teacher (Sanskrit), Directorate of Education, New Delhi
<table>
<thead>
<tr>
<th>BHARATIYA DARSHAN</th>
<th>SANSKRIT SAHITYA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chairperson</strong></td>
<td><strong>Chairperson</strong></td>
</tr>
<tr>
<td>Swami Atmapriyananda</td>
<td></td>
</tr>
<tr>
<td>Vice Chancellor, Ramakrishna Mission Vivekananda University, Belur Math, Howrah</td>
<td></td>
</tr>
<tr>
<td><strong>Members</strong></td>
<td><strong>Members</strong></td>
</tr>
<tr>
<td>Prof. Ram Nath Jha</td>
<td>Dr. Venkataraman Bhat</td>
</tr>
<tr>
<td>Professor, Special Center for Sanskrit Studies, Jawaharlal Nehru University, New Delhi</td>
<td>Assistant Professor, Ramakrishna Mission Vivekananda University, Belur Math, Howrah</td>
</tr>
<tr>
<td>Dr. Ram Narayan Meena</td>
<td>Swami Vedatattwananda</td>
</tr>
<tr>
<td>Assistant Director (Academic), Academic Department, NIOS</td>
<td>Principal, Vivekananda Veda Vidyalaya, Belur Math, Howrah</td>
</tr>
<tr>
<td>Dr. Nagaraj Bhat</td>
<td>Dr. Ram Narayan Meena</td>
</tr>
<tr>
<td>Asst Professor, Ramakrishna Mission Vivekananda University, Belur Math, Howrah</td>
<td>Assistant Director (Academic), Academic Department, NIOS</td>
</tr>
<tr>
<td>Swami Vedarthananda</td>
<td>Sh. Palash Ghodai</td>
</tr>
<tr>
<td>Vice-Principal, Vivekananda Veda Vidyalaya Belur Math, Howrah</td>
<td>Asst Professor, Raja Narendra Lal Khan Women’s College, Gope Palace, PO: Vidyasagar University, (West Bengal)</td>
</tr>
<tr>
<td>Dr. Venkataraman Bhat</td>
<td>Sh. Malay Porey</td>
</tr>
<tr>
<td>Asst Professor, Ramakrishna Mission Vivekananda University, Belur Math, Howrah</td>
<td>Assistant Professor, Raniganj Girls College, P.O. Searsole Rajbari, Dist- Burdwan, (West Bengal)</td>
</tr>
<tr>
<td>Sh. Vivek Karmakar</td>
<td>Dr. Bhaskaranand Pandey</td>
</tr>
<tr>
<td>Asst Professor, Scottish Church College, 1 &amp; 3, Urquhart Square, Kolkata, (West Bengal)</td>
<td>Former Vice principal, Sarvodaya Bal vidyalaya, Delhi</td>
</tr>
<tr>
<td>Sh. Palash Ghodai</td>
<td></td>
</tr>
<tr>
<td>Asst Professor, Raja Narendra Lal Khan Women’s College Gope Palace, PO: Vidyasagar University, (West Bengal)</td>
<td></td>
</tr>
<tr>
<td>PHYSICAL EDUCATION AND YOG</td>
<td>MILITARY STUDIES</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td><strong>Chairperson</strong></td>
<td><strong>Chairperson</strong></td>
</tr>
<tr>
<td>Prof. Kalpana Sharma</td>
<td>Major General G. Murali (Retd.)</td>
</tr>
<tr>
<td>Director ASPESS &amp; Sports</td>
<td></td>
</tr>
<tr>
<td>Amity University, U.P</td>
<td></td>
</tr>
<tr>
<td><strong>Members</strong></td>
<td><strong>Members</strong></td>
</tr>
<tr>
<td>Mrs. Sarita Sharma</td>
<td>Dr. Utham Kumar Jamadhagni</td>
</tr>
<tr>
<td>Director, Yog Sarita Foundation, Delhi</td>
<td>Associate Professor and Head I/c Defence and Strategic Studies, University of Madras</td>
</tr>
<tr>
<td>Prof. Ikram Hussain</td>
<td>Dr. E. Prabhakaran</td>
</tr>
<tr>
<td>Department of Physical Education</td>
<td>Assistant Professor Defence and Strategic Studies University of Madras</td>
</tr>
<tr>
<td>A.M.U., Aligarh</td>
<td>Dr. M. Venkataraman</td>
</tr>
<tr>
<td>Prof. Arvind Malik</td>
<td>Assistant Professor Defence and Strategic Studies University of Madras</td>
</tr>
<tr>
<td>Head &amp; Professor, Department of Physical Education, Kurukshetra University, Kurukshetra</td>
<td>Col Pradeep Kumar T R</td>
</tr>
<tr>
<td>Prof. Ishwar Bharadwaj</td>
<td>Col Rajesh Singh, SC,SM</td>
</tr>
<tr>
<td>Head of Yoga Department Gurukul Kaangri, Haridwar</td>
<td></td>
</tr>
<tr>
<td>Dr. Lalit Sharma</td>
<td></td>
</tr>
<tr>
<td>Associate Professor, IGIPRESS, University of Delhi</td>
<td></td>
</tr>
<tr>
<td>Mr. S.K. Sinha</td>
<td></td>
</tr>
<tr>
<td>Director ( Academic)</td>
<td></td>
</tr>
<tr>
<td>NIOS</td>
<td></td>
</tr>
<tr>
<td>Dr. Ashminder Singh Bahal</td>
<td></td>
</tr>
<tr>
<td>Director (Vocational), NIOS</td>
<td></td>
</tr>
<tr>
<td>Dr. B.K. Rai</td>
<td></td>
</tr>
<tr>
<td>Assistant Director (Academic), NIOS</td>
<td></td>
</tr>
<tr>
<td>Dr. Azmat Noori</td>
<td></td>
</tr>
<tr>
<td>Assistant Director (Academic) NIOS, NOIDA, U.P</td>
<td></td>
</tr>
<tr>
<td>Mr. P.K. Chauhan</td>
<td></td>
</tr>
<tr>
<td>Senior Executive Officer, (Vocational) NIOS, NOIDA, U.P</td>
<td></td>
</tr>
<tr>
<td>MILITARY HISTORY</td>
<td>EARLY CHILDHOOD CARE AND EDUCATION</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td><strong>Chairperson</strong></td>
<td><strong>Chairperson</strong></td>
</tr>
<tr>
<td>Major General G. Murali (Retd.)</td>
<td>Prof. Asha Singh</td>
</tr>
<tr>
<td><strong>Members</strong></td>
<td>Former Associate Professor, Human Development and Childhood Studies (HDCS), Lady Irwin College, University of Delhi, New Delhi</td>
</tr>
<tr>
<td>Dr. Utham Kumar Jamadhagni</td>
<td><strong>Members</strong></td>
</tr>
<tr>
<td>Associate Professor and Head I/c Defence and Strategic Studies, University of Madras</td>
<td>Prof. Reeta Sonawat</td>
</tr>
<tr>
<td><strong>Dr. E. Prabhakaran</strong></td>
<td>Professor and Head, Human Development</td>
</tr>
<tr>
<td>Assistant Professor Defence and Strategic Studies University of Madras</td>
<td>Dept. of Human Development, SNDT Women’s University, Mumbai</td>
</tr>
<tr>
<td><strong>Dr. M. Venkataraman</strong></td>
<td>Dr. Bhanumathi Sharma</td>
</tr>
<tr>
<td>Assistant Professor Defence and Strategic Studies University of Madras</td>
<td>Associate Professor, Human Development and Childhood Studies (HDCS), Lady Irwin College, University of Delhi, New Delhi</td>
</tr>
<tr>
<td><strong>Lt. Col Raja Pillai</strong></td>
<td><strong>Dr. Bharti</strong></td>
</tr>
<tr>
<td></td>
<td>Associate Professor, Department of Education of Groups with Special Needs, NCERT, New Delhi</td>
</tr>
<tr>
<td></td>
<td><strong>Shri B. Sahu</strong></td>
</tr>
<tr>
<td></td>
<td>Deputy Director Training NIPCCD, New Delhi</td>
</tr>
<tr>
<td></td>
<td><strong>Dr. Sandhya Sangai</strong></td>
</tr>
<tr>
<td></td>
<td>Associate Professor, Department of Elementary Education, NCERT, New Delhi</td>
</tr>
<tr>
<td></td>
<td><strong>Dr. Romilla Soni</strong></td>
</tr>
<tr>
<td></td>
<td>Assistant Professor, Department of Elementary Education, NCERT, New Delhi</td>
</tr>
<tr>
<td></td>
<td><strong>Dr. Sangeeta Choudhary</strong></td>
</tr>
<tr>
<td></td>
<td>Senior Lecturer, DIET, Rajendra Nagar, New Delhi</td>
</tr>
<tr>
<td></td>
<td><strong>Ms. Premlata Mullick</strong></td>
</tr>
<tr>
<td></td>
<td>Former Director, Sushila Devi Polytechnic for Women, Ghaziabad</td>
</tr>
<tr>
<td></td>
<td><strong>Ms. Sonia Mehdiratta</strong></td>
</tr>
<tr>
<td></td>
<td>PGT, Happy Model School, New Delhi</td>
</tr>
<tr>
<td></td>
<td><strong>Ms. Fariha Siddiqui</strong></td>
</tr>
<tr>
<td></td>
<td>Programme Manager, BVoc in Early Childhood Management and Entrepreneurship, Ambedkar University, New Delhi</td>
</tr>
<tr>
<td></td>
<td><strong>Dr. Madhur Bhatia</strong></td>
</tr>
<tr>
<td></td>
<td>Academic Officer (Teacher Education) NIOS, NOIDA</td>
</tr>
</tbody>
</table>