In the earlier lesson, we learnt about the origin and development of Indian music as well as some of the prominent personalities and composers. In this lesson, learner will familiarise with the key concepts and fundamentals of Carnatic Music.

Indian Music has been established as an advanced study with well proved concepts and substantiating theorems, according to the contemporary music scenario. All along this evolution, several musicologists have recorded their hypothesis and ideas about Carnatic music and also about Indian music as a whole. Students who pursue Carnatic music in private and also institutional level have to learn these theories and certain basic definitions. Knowledge about the nomenclature and basic concepts are very essential in this regard.

Carnatic Music is very distinct in several aspects such as its melodic nature, the sruti concept, importance of gamaka and its improvisational capacity etc. and above all, its serene nature. The ragas of Indian Music have been always a fascination to the west; with its infinitive creativity, just like the intricate and mind blowing tala system.

OBJECTIVES

After learning this lesson, the learner will be able to:-

- explain the basic terminologies of carnatic music;
- explain the differences of sruti and swara;
- distinguish between different types of harmony;
- identify various talas and layas.
2.1 NADA

Nada is musical sound. It is a sound with a particular frequency that sustains for a considerable period of time. This unique concept of Indian music, finds its origin from Nadabrahma, due to its spiritual nature. The word ‘Nada’, originated from ‘nadyate’. Nada is of two kinds **Ahata and Anahata**. The latter is described as super human sound, which is not audible to an ordinary human being. The former is the one which is audible to human ear. Ahata nada can be classified into- **Shariraja, Charmaja, Lohaja, Vayuja** etc., according to the source from where it is generated.

**INTEXT QUESTIONS 2.1**

1. What is nada?
2. How many kinds of nada are there?
3. From where, the word Nada had originated?
4. Name the Nada which is not audible to normal human ears.
5. On what basis the Ahata nada has been classified?

2.2 SWARA

Swara is the musical note. Technically speaking, the raga or melody of Indian music is constituted with these minute elements. The word swara has been defined by learned as:

"Swato ranjayati srotruchitanam sa swarochyate"

i.e. swara is that, which is able to entertain the soul of audience on its own.

Swaras are seven in number and are collectively known as Saptaswara

They are as follows:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Swara</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Shadjam</td>
<td>Sa</td>
</tr>
<tr>
<td>2.</td>
<td>Rishabham</td>
<td>Ri</td>
</tr>
<tr>
<td>3.</td>
<td>Gandharam</td>
<td>Ga</td>
</tr>
<tr>
<td>4.</td>
<td>Madhaymam</td>
<td>Ma</td>
</tr>
</tbody>
</table>
Key Concepts of Carnatic Music

<table>
<thead>
<tr>
<th>Swara</th>
<th>Frequency or Swarasthana</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panchamam</td>
<td>Pa</td>
</tr>
<tr>
<td>Dhaivatam</td>
<td>Dha</td>
</tr>
<tr>
<td>Nishadam</td>
<td>Ni</td>
</tr>
</tbody>
</table>

Each of these swaras is sung in different frequencies in the ascending order. These frequencies or places in which the swara sung are called ‘SWARASTHANA’. Though the swaras are seven in total, all the five swaras, except Shadja and Panchama, have one more frequency position or one more swarasthana with different name, which results in twelve swarasthanas in total. These are collectively known as ‘DWADASA SWARASTHANAS’, as follows:

<table>
<thead>
<tr>
<th>Swara</th>
<th>Frequency or Swarasthana</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shadja</td>
<td>Sa</td>
</tr>
<tr>
<td>Suddha Rishabham</td>
<td>Ri1</td>
</tr>
<tr>
<td>Chatushruti Rishabham</td>
<td>Ri2</td>
</tr>
<tr>
<td>Sadharna Gandharam</td>
<td>Ga1</td>
</tr>
<tr>
<td>Antara Gandharam</td>
<td>Ga2</td>
</tr>
<tr>
<td>Suddha Madhyamam</td>
<td>Ma1</td>
</tr>
<tr>
<td>Prati Madhyamam</td>
<td>Ma2</td>
</tr>
<tr>
<td>Panchamam</td>
<td>Pa</td>
</tr>
<tr>
<td>Suddha Dhaivatam</td>
<td>Dha1</td>
</tr>
<tr>
<td>Chatushruti Dhaivatam</td>
<td>Dha2</td>
</tr>
<tr>
<td>Kaisiki Nishadam</td>
<td>Ni1</td>
</tr>
<tr>
<td>Kakali Nishadam</td>
<td>Ni2</td>
</tr>
</tbody>
</table>

**INTEXT QUESTIONS 2.2**

1. How many swaras are there in total?
2. Name the frequency position of a swara.
3. How many swarasthanas are there in total?
4. What is Dwadasa swarasthana?
5. Explain the word swara?
**2.3 SRUTI**

Sruti is the smallest interval of pitches, (differences between two frequencies) that can be detected by a trained ear. It is defined by the age old musicologists as:

“Sravanendriya grahyatwad dhwanireva srutir bhavet”

In other words, sruti and swara are the two sides of the same coin. Since ancient period, the argument about the entity of these two remain parallel among the learned. Many musicologists are of the opinion that the sound of frequency is called **Sruti**, when it played in a musical instrument and when one sings it with syllables is called **Swara**.

According to the size of these differences of frequencies, srutis are classified into three types:

- The smallest variety is called **‘NYUNA sruti’**
- The medium variety is called **‘PRAMANA sruti’**
- The biggest variety is called **‘POORNA sruti’**

Although the total number of sruti is commonly accepted by almost all the musicologists as 22; there exists a difference of opinion in this regard. ‘Bharata’ was the first musicologist to experiment and declare the total number of srutis and he also gave different names for srutis.

**INTEXT QUESTIONS 2.3**

1. What is sruti?
2. How many types of srutis are there in total?
3. What is the total number of srutis?
4. Who is the first musicologist who experimented on srutis?
5. Differentiate between sruti and swara.

**2.4 STHAYI**

The interval or span made up of Shadja to Nishada is called Sthayi in Indian music. This sthayi comprises seven Swaras such as Shadja, rishabha, gandhara, madhyama, panchama, dhaivata and nishada and its other varieties of swarasthanas. This span of saptasvaras is known as **Madhya sthayi**.

The next span of saptaswaras beginning with shadja that comes after nishada is
Key Concepts of Carnatic Music

called Tara sthayi. Further, the next span of saptaswaras above the Tara sthayi is called Ati Tara sthayi.

The span of saptaswaras below Madhya sthayi is called Mandra sthayi and the sthayi below this is known as Anumandra sthayi.

Thus, there are five sthayis in total. Human voice has the range of only three sthayis in the middle. Only music instruments can reach in these five sthayis effortlessly.

INTEXT QUESTIONS 2.4

1. Explain the word sthayi.
2. How many sthayis are there in total?
3. Human voice can reach how many sthayis?
4. Instrumentalists can reach how many sthayis?

2.5 GAMAKA

“Swarasya kampo Gamakaha srothorchitta Sukhavah”

Oscillation of Swara which gives soothing effect of the listener.

Minute embellishment that is attached to a swara is called “GAMAKA”. These shakes or graces, which beautify the swara phrases and the raga is a distinct quality of Indian music. Several musicologists have given different types of gamakas and they vary in their numbers also.

15 Gamakas mentioned in Sangita Ratnakara are as follows:

1. Tirupam
2. Spuritam
3. Kampitam
4. Leenam
5. Andolitam
6. Vali
7. Tribhinnam
8. Kurulam
9. Aahatam
10. Ullasitam
11. Plavitam
12. Humpitam
13. Mudritam
14. Namitam
15. Misritam
Apart from this, ‘Kohala’ says about thirteen gamakas and Ahobala’s Parijata says about seventeen gamakas.

At present musicians of Carnatic music follow only the Dashavidha Gamakas.

**INTEXT QUESTIONS 2.5**

1. What do you understand by gamaka?
2. According to Sangita Ratnakara, how many gamakas are there in total?
3. How many gamakas are there according to Kohala?
4. According to Sangita Parijata, how many gamakas are there in total?

**2.6 MELA**

Musical scales with the potential to generate new ragas or melodies are called as MELA. The literary meaning of the word ‘Mela’ is combination of swara. ‘Vidyaranya’, preceptor of the Vijayanagara empire, brought the concept of Mela to Carnatic music. He consolidated popular and prominent melodies which prevailed during his time and named them as Melas. In continuation, his predecessors consolidated prominent Melodies of their time and called them as Melas and brought similar ragas under them, naming them as ‘Janya ragas’.

**2.6.1 Scheme of 72 Mela**

Venkatamakhi brought a major change to the Carnatic music parlance by constituting the 72 Mela scheme by the permutation and combination of existing Swarasthanas with four fictional notes such as Shatshruti Rishabham (Sadharana gandharam), Suddha gandharam (chatushruti rishabham) Shatshruti dhaivatam (kaisiki nishadam) and Suddha nishadam (chatushruti dhaivatam). These 16 swarasthanas are collectively known as Shodasa Swarasthanas.

**2.6.2 (a) Shodasa Swarasthanas**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Shadja</td>
</tr>
<tr>
<td>2.</td>
<td>Suddha Rishabha</td>
</tr>
<tr>
<td>3.</td>
<td>Chatushruti Rishabha</td>
</tr>
<tr>
<td>4.</td>
<td>Sadharana Gandhara</td>
</tr>
</tbody>
</table>
Key Concepts of Carnatic Music

5. Antara Gandhara
6. Suddha Madhyama
7. Prati Madhyama
8. Panchama
9. Suddha Dhaivata
10. Chattushruti Dhaivata
11. Kaisiki Nishada
12. Kakali Nishada
13. Suddha Gandhara (Fictional Note)
14. Shadshruti Rishabha (Fictional Note)
15. Suddha Nishada (Fictional Note)
16. Shatshruti Dhaivata (Fictional Note)

Govindacharya (1857 A.D) formulated the 72 Mela scheme, which we follow today, by avoiding the discrepancies of Asampurna Mela Padhati the former one, which was envisaged by Venkatamakhi. He kept some rules for the scales to be considered as Melas, they are as follows:-

- The scales should have all the seven swaras.
- It should begin with Shadja and end with Shadja in the higher octave, thus making eight swaras in total.
- The swaras should be arranged in proper ascending and descending order.
- The homogenous character of swaras should be maintained throughout the Mela.

INTEXT QUESTIONS 2.6

1. What do you understand by Mela?
2. Who brought the concept of Mela to Carnatic music?
3. Who conceptualized the 72 Mela scheme?
4. Name the musicologist who modified the 72 Mela scheme.
5. What are the characteristics of a Mela?

2.7 RAGA

Raga is the pivotal concept of Indian music. Matanga, who introduced the concept of Raga through his illustrated work- “Brihaddesi”, defined Raga as
“Swara Varna viseshena dhvani bhedena vah : puna Rajyate yena kathita sa raga sammatassatam”

Any melody that entertain the listeners by the variety of its swara passages or different emotions is called Raga. Raga is the minor melody which is derived from Mela or parental scale. These minor scales, differ from its parental scale and keep a different entity altogether by either changing some swarasthana of its parent scale or omitting any note in Arohana or Avarohana or by progressing in zig-zag way. The possibility of making new ragas out of its parent scale is thus infinite. There are different ragas with same scale and same variety of Notes, by adding various Gamakas and embellishments to its different Swaras.

2.7.1 Raga Classification

Ragas of Carnatic Music are classified in to several heads, according to the way it has presented. Different musicologists have recorded different types of classifications for ragas in different ages. These classifications were relevant at those times according to the method of handling the particular melodies.

The present day Carnatic Ragas are classified as follows:

```
<table>
<thead>
<tr>
<th>RAGA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Janaka Raga</td>
</tr>
<tr>
<td>Janya Raga</td>
</tr>
<tr>
<td>Upanga</td>
</tr>
<tr>
<td>Bhashanga</td>
</tr>
<tr>
<td>Varjya</td>
</tr>
<tr>
<td>Vakra</td>
</tr>
<tr>
<td>Sampoorna Shadava</td>
</tr>
<tr>
<td>Sampoorna Audava</td>
</tr>
<tr>
<td>Shadava Sampoorna</td>
</tr>
<tr>
<td>Audava Sampoona</td>
</tr>
<tr>
<td>Shadava Shadava</td>
</tr>
<tr>
<td>Audava Audava</td>
</tr>
<tr>
<td>Shadava Audava</td>
</tr>
<tr>
<td>Audava Shadava</td>
</tr>
<tr>
<td>Arohana Vakra</td>
</tr>
<tr>
<td>Avarohana Vakra</td>
</tr>
<tr>
<td>Ubhaya Vakra</td>
</tr>
<tr>
<td>Ghana</td>
</tr>
<tr>
<td>Naya</td>
</tr>
<tr>
<td>Desya</td>
</tr>
<tr>
<td>Suddha</td>
</tr>
<tr>
<td>Chayalaga</td>
</tr>
<tr>
<td>Kantaka</td>
</tr>
<tr>
<td>Desya</td>
</tr>
<tr>
<td>Nishadanty</td>
</tr>
<tr>
<td>Dhaivatantya</td>
</tr>
<tr>
<td>Panchamantya</td>
</tr>
<tr>
<td>Sankeema</td>
</tr>
</tbody>
</table>
```
Ragas are mainly classified into two - Janaka ragas and Janya ragas. The former one keeps the scale of its parent raga intact but adds gamakas and different types of movements for its melodic beauty.

Janya ragas are again classified into several ways, such as;

### 2.7.2 Upanga and Bhashanga

i. Upanga raga, are those which admits swaras only of its parent scale i.e. Mela.

ii. Bhashanga raga, are those which admits swaras even other than its Mela.

### 2.7.3 Shadava, Audava, Swarantara, Sampoorna shadava, Shadava sampoorna, Sampoorna Audava and Audava sampoorna

i. Shadava: one which has only six swaras in its scale.

ii. Audava: one which has only five swaras in its scale.

iii. Swarantara: one which has only four or three swaras in its scale.

iv. Sampoorna shadava: one which has all swaras in its ascending and only six in its descending.

v. Shadava sampoorna: one which has only six swaras in its ascending and all swaras in its descending.

vi. Sampoorna Audava: one which has all the swaras in its ascending and only five swaras in its descending.

vii. Audava sampoorna: one which has only five swaras in its ascending and all the swaras in its descending.

### 2.7.4 Ghana, Naya and Desya

i. Ghana : One which is very majestic in nature and vibrant with brisk swara passages.

ii. Naya : One which is very elaborative and heavy in classicism.

iii. Desya : One which is very pleasant, soothing and light to perform.

### 2.7.5 Sudha, Chayalaga and Sankeerna

i. Sudha : One which does not have any similarity with any other melody.

ii. Chayalaga : One which has traces of some other raga in its progression.

iii. Sankeerna : One which is very complicated as it is linked with several ragas.
2.7.6 Karnatak and Desya

i. Karnataka : One which originated and developed indigenously.

ii. Desya: one which is adopted from Hindustani system or any other Music system.

2.7.6 Nishadantya, Dhaivatantya and Panchamantya

i. Nishadantya : The scale of this raga ends with Madhya sthayi nishada in ascending and mandra sthayi nishada in descending.

ii. Dhaivatantya : The scale of this raga ends with madhya sthayi dhaivata in ascending and mandra sthayi dhaivata in descending.

iii. Panchamantya : The scale of this raga ends with madhya sthayi panchama in ascending and mandra sthayi panchama in descending.

INTEXT QUESTIONS 2.7

1. What do you understand by raga?

2. What is janya raga?

3. Ragas are mainly classified into how many heads?

4. How ragas are classified according to the number of swaras?

5. How ragas are classified according to the melodic similarties with each other?

2.8 Tala

Tala; again is a peculiarity of Indian music. It is the act of regulating the speed of music, compiled with several hand gestures in a cyclic process.

“Kaalo laghunadimitaya kriyaya
Sammito matim geetader vidadhataala”

Though there is a rhythm or laya, under current in the music of every country; Indian music stands unparallel with its outward expression in different variety.

2.8.1 Tala Das Pranas

Tala is defined as the union and separation of the two hands, according to the dasa pranas or the ten elements, governing the correct reckoning of tala. These ten elements are Kaala, Marga, Kriya, Anga, Graha, Jaati, Kala, Laya, Yati and Prastara.
2.8.2 Shadangas

Tala is constituted mainly with six elements which are collectively known as **Shadangas.** They are Anudrutam, Drutam, Laghu, Guru, Plutam and Kakapadam. These six angas with their sign and aksharakala (time duration) and method of reckoning are as given below:

<table>
<thead>
<tr>
<th>S.NO.</th>
<th>ANGA</th>
<th>SYMBOL</th>
<th>AKSHARAKALA</th>
<th>MODE OF RECKONING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Anudrutam</td>
<td>✮</td>
<td>1</td>
<td>A beat</td>
</tr>
<tr>
<td>2.</td>
<td>Drutam</td>
<td>○</td>
<td>2</td>
<td>A beat and a wave</td>
</tr>
<tr>
<td>3.</td>
<td>Laghu</td>
<td>1</td>
<td>3,4,5,7,9</td>
<td>A beat and finger counts</td>
</tr>
<tr>
<td>4.</td>
<td>Guru</td>
<td>8</td>
<td>8</td>
<td>A sashabda Laghu and a nishabda laghu</td>
</tr>
<tr>
<td>5.</td>
<td>Plutam</td>
<td>1 8</td>
<td>12</td>
<td>A beat, a krushya and sarpini</td>
</tr>
<tr>
<td>6.</td>
<td>Kakapadam</td>
<td>+</td>
<td>16</td>
<td>beat, a pataka, a krushya and a sarpini</td>
</tr>
</tbody>
</table>

2.8.3 Sooladi Sapta Talas

Since the time of its inception, Indian music follows the scheme of 108 talas, in which, the first five talas are considered as Margi talas and the rest 103 talas are called as Desi talas. For the first time, we come across the concept of basic seven talas or Sooladi Sapta Talas in the musical text ‘Sangeeta Parijata’ by Ahobala. Thus, the separate tala system for Carnatic music was emphasised by none other than the Sangeeta Pitamaha of Carnatic music- ‘Saint Purandaradasa’. He composed simple alankarams and other compositions called sooladi in these basic seven talas. These seven talas and their details are given below:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>TALA</th>
<th>ANGAS</th>
<th>AKSHARAKALA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Dhruva</td>
<td>Laghu-drutam-laghu-drutam-laghu</td>
<td>(I₄ 0I₄ I₄)</td>
</tr>
<tr>
<td>2.</td>
<td>Mathya</td>
<td>Laghu-drutam-laghu</td>
<td>(I₄ 0I₄)</td>
</tr>
<tr>
<td>3.</td>
<td>Roopaka</td>
<td>Drutam-laghu</td>
<td>(0I₄)</td>
</tr>
<tr>
<td>4.</td>
<td>Jhampa</td>
<td>Laghu-Anudrutam-drutam</td>
<td>(I₇UO)</td>
</tr>
</tbody>
</table>
Key Concepts of Carnatic Music

5. Triputa  Laghu-drutam-drutam  7  (I₃ 00)
6. Ata   Laghu-Iaghu-drutam-drutam  14  (I₅ I₅ 00)
7. Eka    Laghu  4  (I₄)

INTEXT QUESTIONS 2.8

1. Define the word tala.
2. Name the tala system prevalent before the present one.
3. Who brought the concept of sapta talas?
4. Who made the sapta talas into practice?
5. How many angas are there in a tala?

WHAT YOU HAVE LEARNT

India is a country with a diversity of culture and caters all sects of music. It finds its roots from the Vedic chants, which evolved through centuries to the present Carnatic and Hindustani styles. Indian music has several distinctive qualities such as Sruti, Gamakas, Raga, Tala etc. It starts and ends with the knowledge of Nada, as whole music is NADOPASANA. Nadopasana adoration to God is another unique concept of Indian music, where the singer completely dedicates himself to pure music as a means of attaining salvation.

This worship of Nada or Nadopasana helps us to personify shruti and swara, which are almost identical with only minute distinctions. Indian classical music’s system has seven swaras which are sung in different frequencies called swarasthanas. In Indian music, we follow the principles of melody, i.e. proceeding through single notes following one another to create a tune. The different permutations and combinations of swaras create different ragas. These ragas are ‘sung or played with gamaka- small graces or embellishments making Indian music purely distinctive and imperenial. The compositions in Carnatic music are mainly sacred in nature and are constituted with several talas i.e. cycles of different rhythmic patterns.

TERMINAL EXERCISE

1. Briefly explain the concept of Nada in Carnatic music.
2. Elucidate seven swaras and its varieties in detail.
Key Concepts of Carnatic Music

3. Describe the classification of ragas elaborately.
4. Write down the concept of tala and its varieties.

ANSWER TO INTEXT QUESTIONS

2.1
1. Nada is a musical sound with a particular frequency that sustains for a particular period of time.
2. Two
3. Nadyate
4. Anahata
5. Ahata nada is classified on the basis of its source from where it is generated.

2.2
1. Seven
2. Swarasthanas
3. 12
4. Swarasthanas are 12 in number, thus called dwadasa swarasthanas.
5. It is the musical note.

2.3
1. Sruti is the smallest interval of pitch or difference between two frequencies that can be detected by the ear
2. Three types
3. 22
4. Bharata
5. The sound of the frequency is called sruti and when one sings it with syllables, it is called swara.

2.4
1. In Indian music, the interval or span made up of shadja to nishada is called sthayi.
2. Five in number
3. 3 sthayis.
4. All five sthayis.

2.5
1. The minute embellishments that are attached to a swara is called gamaka.
2. 15 gamakas.
3. 13 gamakas.
4. 17 gamakas.
5. 10 gamakas.

2.6
1. The musical scales with the potential to generate new ragas or melodies are called Melas.
2. Vidyaranya.
3. Venkatamakhi
4. Govindacharya
5. The basic character of mela are:
   The scales should have all the seven swaras beginning from shadja and ending with ‘sa’ in the higher octave making 8 swaras in total. They should be arranged in order of ascending or descending and should contain the homogenous character of swaras.

2.7
1. Ragas are the minor melodies which are derived from Mela or a parental Scale. It differs from its parent scale and keeps a different entity altogether by either changing some swarasthanas of its parent Mela or by any swaras from ascending or descending or by progressing in zig zag manner.
2. Janya ragas are minor melodies derived from a parent scale.
3. Two (Janya and Janaka)
   Shadava, Andava, Swarantara and Sampoorna.
4. Shuddha, Chayalaga and Sankeerna.
1. Tala is the act of regulating the speed of music complied with several hand gestures in a cyclic process.

2. 108 tala paddhati

3. Ahobila

4. Saint Purandardasa

5. 6

**SUGGESTED ACTIVITY**

1. Try to find out different types of ragas with its arohana and avarohana along with its parent scale.

2. Find out the duration of each tala and its method of reckoning.