This Question Paper consists of **29** questions and **4** printed pages.

Roll No. | | | | | | | | | | | | | **Code No.** **64/VOC/O**

Set - A

DIPLOMA IN MEDICAL IMAGING TECHNOLOGY

(Basic Human Anatomy and Physiology, Orientation of X-ray Department, Darkroom Procedures) Paper-I

(Theory)

(471)

Day and Date of Examination _____

Signature of Invigilators 1. _____

2. _____

General Instructions :

1. Candidate must write his/her Roll Number on the first page of the Question Paper.

2. Please check the Question Paper to verify that the total pages and total number of questions contained in the question paper are the same as those printed on the top of the first page. Also check to see that the questions are in sequential order.

3. For the objective type of questions, you have to choose any one of the four alternatives given in the question, i.e., (A), (B), (C) or (D) and indicate your correct answer in the answer-book given to you.

4. Making any identification mark in the answer-book or writing Roll Number anywhere other than the specified places will lead to disqualification of the candidate.

5. Answers for all questions, including matching, true or false, fill in the blanks, etc., are to be given in the answer-book only.

6. Write your Question Paper Code No. **64/ACV/O**, Set **A** on the answer-book.

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Time allowed : ***3*** *Hours]* *[Maximum Marks :* ***75***

Note : *(i)* ***All*** *questions are* ***compulsory****.*

(ii) Marks are indicated against each question.

Answer the following questions in detail. *10+10=20*

1. Illustrate the anatomy and functions of liver and gall-bladder.

2. Describe the effects of acute radiation exposure on the whole body.

Write short notes on the following : *7×5=35*

3. Processing tanks in darkroom.

4. Causes of film fog.

5. Somatic effects of radiation.

6. Radiography of anaesthetized patient.

7. X-ray cassette.

8. FSD and SSD.

9. Duties of radiotherapy technician while treating a patient.

Write State True or False for the following statements. Write your answer in the answer-book. *10×1=10*

10. Darkroom processing is required for digital X-ray film.

11. X-ray exposure of pregnant lady must be avoided specially when they are in 8 – 15 weeks period.

12. Focal spot cracks due to warming of X-ray machine.

13. 1 Rad = 100 Grey.

14. All X-ray machines and some radiotherapy machines need warming before being operated on full-load.

15. Gloves and Aprons offer protection against secondary radiation and not against primary radiation.

16. Same doses of different radiations produce same biological effect in a given tissue.

17. Ideally 10 ft floor space is needed for a Darkroom.

18. Fixing is done before Developing.

19. Static marks are caused by water.

Fill in the blanks. Write your answer in the answer-book : *10×1=10*

20. Bowel preparation is required for _____ X-ray.

21. Sagittal suture lies between _____ bones.

22. MLC means _____ cases.

23. Lead equivalent to _____ is used for protection of radiation in fluoroscopy chair and lead flaps.

24. Radiographer should always wear _____ and _____ while working.

25. Quality of image is improved by reducing _____ and _____ during radiography.

26. X-ray cassettes should be checked periodically for proper film-screen contact using a _____ .

27. Acute exposure dose _____ is required to effect cataract within 5 – 10 years.

28. Unit of radiation is _____ .

29. Beam modifying devices are used to _____ of image during radiography.