*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

(Regional Radiography, Basic & Radiation Physics, Radiation Hazards & Protection Contrast Media)

Paper – II

(Theory)

(472)

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/VOC/O**, Set **A** on the answer-book.

DIPLOMA IN MEDICAL IMAGING TECHNOLOGY
(Regional Radiography, Basic & Radiation Physics, Radiation Hazards & Protection Contrast Media)
Paper - II
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Time allowed : ***3*** *Hours]* *Total Marks -* ***75***

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

(ii) Marks are indicated against each question.

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

1. What are the contrast media used for imaging hepatobiliary system ? Describe the adverse reactions of contrast media.

2. Describe various views of Skull Radiography.

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

3. Role of grid in film clarity.

4. Decubitus view of chest.

5. X-ray of mastoid air cells.

6. Postion of patient for X-rays of Paranasal sinuses.

7. X-ray of Arch of Aorta.

8. Types of Transformers.

9. X-ray Photon.

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

10. X-rays do not travel in straight line and can be focussed by lens.

11. X-rays are electromagnetic rays which behave as waves as well as particles.

12. Most modern X-ray tubes have a single filament assembly having its own cup.

13. Filament of an X-ray tube is made up of Tungsten wire element.

14. Contrast media is used for imaging to visualize many organs in the body.

15. Grid does not remove the scattered radiation from radiographic field during Radiography.

16. Scattered radiation travels in a straight line.

17. For Skull Radiography, Postero-Anterior Projection (P.A. View) is used over Antero-Posterior Projection (A.P. View) to avoid excessive radiation to lens.

18. X-rays can cause tissue damage of Pediatric Skeleton Radiography.

19. Grid is used for X-ray of KUB.

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

20. The direction of the electro-magnetism is represented by the _____ rule.

21. _____ magnet is used in modern MRI equipment.

22. Non-ionic contrast is better used in _____ .

23. The device that stores electric energy is called _____ .

24. The cleansing enema for preliminary preparation of Abdominal imaging is _____ in cases of "Acute Abdomen."

25. For X-ray chest to minimize cardiac magnification, long FFD i.e. _____ cm is used.

26. Use of higher grid ratio means _____ dose to the patient.

27. The process of changing alternate current to direct current is called _____ .

28. The filament of X-ray tube is made up of _____ .

29. Grid ratio is the ratio of _____ of lead strip and _____ between them.