

## DIPLOMA IN MEDICAL IMAGING TECHNOLOGY

( Recent Advances in Imaging, Special Diagnostic Procedures )

Paper : III

( Theory )

(473)

Time : 3 Hours ]

[ Maximum Marks : 75

- Note : (i) All Questions are compulsory.  
(ii) Marks are indicated against each question.

Answer the following questions elaborately :

10+10=20

1. What is cholangiography? List the types of direct cholangiography. Describe the indications, patient preparation, technique, complications and post-procedure care of ERCP in detail.
2. Describe the preparation of patient for MRI. Mention its advantages and limitations and safety considerations.

Write short notes on the following :

5×7=35

3. Indications of barium swallow
4. Attachment of umbilical cord and its function
5. Indication of thermography
6. Use of air in double-contrast barium meal for upper GIT
7. Voiding cystourethrography
8. Indication of myelography
9. Digital radiography

Write True or False for the following statements. Write your answer in the answer-book :

1×10=10

10. CT IVP can demonstrate functional capacity of both kidneys.
11. Angiography can demonstrate both side kidney at a time.
12. Oral contrast is also given for renal angiography.
13. In a single nuclear scan, both kidneys and other organs can be studied.
14. 'C' loop of duodenum can be demonstrated by barium meal study.
15. Ryle's tube is passed to stomach through trachea also.
16. Foreign body in oesophagus can be demonstrated by endoscopy.
17. Barium solution and air are mixed first and then given to patient for barium enema.
18. Overnight fasting is preferably required for contrast CT examination.
19. Ultrasound, CT scan and MRI—all the three modalities—can be required for a single patient.

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

20. \_\_\_\_ will happen to the film of X-ray abdomen if exposure is taken without grid.
21. In CR system, the X-ray photons are converted to light signals which are further converted to \_\_\_\_.
22. PET stands for \_\_\_\_.
23. In fluoroscopy during barium swallow, \_\_\_\_ is also studied along with oesophagus.
24. For double-contrast barium enema, \_\_\_\_ is used to push air to large gut.
25. For intercondylar space imaging, the patient sits or lies with knee in \_\_\_\_ position.
26. For acromioclavicular joint imaging, \_\_\_\_ view is advised.
27. Coronary artery is the branch of \_\_\_\_.
28. Angiography is the study of \_\_\_\_ system of the body.
29. In HSG, \_\_\_\_ is used to push the contrast inside the uterus.

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