

RADIOLOGY AND IMAGING TECHNOLOGY

PAPER-II

**IMAGE PROCESSING TECHNIQUES & SPECIAL
RADIOGRAPHY PROCEDURES**

Time: 3 Hours

Max Marks: 80

Note: Answer all questions

Draw diagrams whenever necessary with Black Ball point pen /HB pencil /any dark
Color pencil.

Write an essay on any TWO of the following questions:

2 X 10 = 20

1. What are the types of grids. Write in detail about moving grids.
2. Direct radiography system and types. Write in detail about direct detection flat panel system.
3. What is Image intensifier. Write in detail about elements of image intensifier.

Write a short note on any FIVE of the following:

5 X 6 = 30

4. Describe Cassette structure with the help of diagram.
5. Write in detail about characteristic of intensifying screens.
6. Describe Dark room.
7. PACS.
8. Breast Tomosynthesis.
9. Describe in brief about automatic film processor with the help of diagram.

Write briefly on the following:

10 X 3 = 30

10. Applications of charge coupled devices.
11. Imaging plate.
12. Safe light.
13. Characteristic curve of X-ray film.
14. Grid ratio.
15. Advantages of magnification mammography.
16. How can be the patient radiation dose be reduced during fluoroscopic imaging?
17. Advantages of digital fluoroscopy.
18. Name the components of mammography equipment.
19. Handling of X-ray film.
