

Day : Monday

Time : 10:00 AM-12:00 PM

Date : 23-01-2023

W-25410-2022

Max. Marks : 40

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1. There are Three sections as follows:

Section- A - Objective Type Questions	20 Marks
Section- B - Long Answer Questions	20 Marks
Section- C - Short Answer Question	20 Marks
  2. Section B has four long questions and ANY TWO have to be answered.
  3. Section C has six short questions and ANY FOUR have to be answered.
  4. Answer to both sections B and C should be written in same answer book.
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**SECTION – B**

Answer ANY TWO out of FOUR questions (10 x 2= 20)

1. Describe in detail about the intensifying screens.
2. Write in detail about X-ray artefacts.
3. Describe the interaction of X-rays with matter.
4. What are the two different types of X-rays generated by a X-ray tube? Describe them in detail and explain the differences between them.

**SECTION – C**

Answer ANY FOUR out of SIX questions (5 x 4= 20)

1. What are the four problems encountered with automated processing?
  2. What are the disadvantages of manual film processing?
  3. Describe a darkroom safelight lamp.
  4. Describe in short about rectifiers.
  5. Describe in short regarding different factors affecting radiographic quality.
  6. Describe the process of X-ray beam production by the X-ray tube.
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5. There are Three sections as follows:
- |                                       |          |
|---------------------------------------|----------|
| Section- A - Objective Type Questions | 20 Marks |
| Section- B - Long Answer Questions    | 20 Marks |
| Section- C - Short Answer Question    | 20 Marks |
6. Section B has four long questions and ANY TWO have to be answered.  
7. Section C has six short questions and ANY FOUR have to be answered.  
8. Answer to both sections B and C should be written in same answer book.

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**SECTION – A**

**Multiple Choice questions have been provided. Tick the single best answer. (10 x 2 =20)**

- Which is the preferred type of entrance to a darkroom?
  - Revolving door
  - Maze
  - Electronically interlocked door
  - Single door
- For how long should a film be ideally washed in manual processing?
  - 5-10 min
  - 15-20 min
  - 30-45 min
  - 45-60
- What should be the minimum working distance from safelight:
  - 2 mtr
  - 1 mtr
  - 3 mtr
  - 5 mtrs
- With help of which chemical can we prevent fogging?
  - Restrainer
  - Fixing agent
  - Both
  - None
- What is base of a radiographic film made of?
  - Polyester plastic
  - Carbon coating
  - Lead
  - Gelatin

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6. Which of the following is not a part of radiographic film?
  - A. Base
  - B. Emulsion Coating
  - C. Adhesive
  - D. Lead coating
7. Which of the following materials is used to insulate an X-ray tube?:
  - A. Water
  - B. Oil
  - C. Gas
  - D. Lead
8. What is the ideal temperature for drying films?
  - A. 60 degFahrenheit
  - B. 70 degFahrenheit
  - C. 80 degFahrenheit
  - D. 90 degFahrenheit
9. Single emulsion radiographic film is used in which investigation:
  - A. Hysterosalpingography
  - B. Barium swallow
  - C. Mammography
  - D. IVP
10. Which halide is most commonly used in radiographic film?
  - A. Silver bromide
  - B. Silver chloride
  - C. Silver fluoride
  - D. Sodium bromide

**Total Marks Obtained:** \_\_\_\_\_

**Signature of Invigilator:**

**Signature of Examiner:**

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