Roll No.

Total No. of Pages: 02

Total No. of Questions: 11

# M.Sc. (Radiology & Imaging Technology) (Sem.-1) INSTRUMENTATION OF CONVENTIONAL X-RAY & SPECIALIZED RADIOLOGY EQUIPMENTS

Subject Code: MRIT 104-21 M.Code: 91377

Date of Examination: 21-01-23

Time: 3 Hrs. Max. Marks: 70

#### **INSTRUCTIONS TO CANDIDATES:**

- 1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains EIGHT questions carrying FIVE marks each and students have to attempt any SIX questions.
- 3. SECTION-C will comprise of two compulsory questions with internal choice carrying TEN marks each.

## **SECTION-A**

# 1. Write briefly:

- a) What do you understand by Polyphase supply?
- b) Enlist the x-ray circuit components.
- c) Enlist the type of rectifiers.
- d) Describe ionization timers.
- e) What do you mean by mobile x-ray equipment?
- f) What is the principle of tomography?
- g) Define quality assurance program.
- h) List the equipment for linear tomography.
- i) What is skull table?
- j) What do you mean by corrective action?

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#### **SECTION-B**

- 2. Describe the safety rules for radiographers.
- 3. Describe in detail types of generators.
- 4. What are the devices for improving radiographic quality? Give the detail.
- 5. Write a note on exposer switching and its applications.
- 6. What are the acceptable limits of variations?
- 7. Describe the spot film devices.
- 8. Discuss the details of dental x-ray equipment.
- 9. What is panel type image intensifier? Give a descriptive account.

#### **SECTION-C**

10. Describe in detail about the medium frequency and high frequency generators.

## OR

- What is Pantomography? Why is important in dentistry? Give an detail account for the instrument used for Pantomography.
  - 11. Give a detail account on the equipment for cranial and skeletal radiography.

## OR

Discuss in detail about care, maintenance and quality control test for mammograph and Skeletal radiography instruments.

NOTE: Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.

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