Roll No.

Total No. of Pages: 02

Total No. of Questions: 11

# M.Sc. (Radiology & Imaging Technology) (Sem.-3) QUALITY CONTROL IN RADIOLOGY AND RADIATION SAFETY

Subject Code: MRIT304-21 M.Code: 92657

Date of Examination: 19-12-22

Time: 3 Hrs. Max. Marks: 70

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

- 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 in both these questions. Each question carries TEN marks.

### **SECTION-A**

# 1. Answer the following questions:

- a. Discuss quality control parameters in radiology.
- b. What is film wastage?
- c. What is mammographic equipment?
- d. What is the special care given to mobile equipment?
- e. What are quality assurance activities in radiology?
- f. How do you explain accuracy of image and fault tracing?
- g. What are the general requirements for the storage of the film and chemicals?
- h. Describe the maintenance of automatic processor and manual processor.
- i. What are the types of image artifacts?
- j. Enlist the modern radiological imaging equipment with their uses.

1 M-92657 (S33)-896

### **SECTION-B**

- 2. Explain briefly about the ultrasonography and PACS.
- 3. Describe the laser printer calibration also explain the film latitude and film contrast.
- 4. What is the difference between the basic computed tomography and advanced computed tomography?
- 5. Explain about the maintenance of the various diagnostics and imaging units.
- 6. What do you know about the principles & preventive maintenance of X-ray and CT scan?
- 7. How do you explain the quality control in radiology?
- 8. Briefly describe the maintenance & working of various radiology equipment.
- 9. Discuss about the digital radiography and computed radiography.

# **SECTION-C**

10. What do you know about film processing?

OR

Discuss fault tracing and image distortion?

11. Explain the record keeping and log book maintenance.

OR

Describe the special care of the different types of mobile equipment.

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.

**2** M-92657 (S33)-896