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BACHELOR OF SCIENCE (RADIOLOGY & IMAGING TECHNOLOGY)(CBCS-2019 COURSE)
B.Sc. (R&IM) Sem III : WINTER- 2022
SUBJECT : EQUIPMENTS IN RADIOLOGY & BASIC IMAGING

Day : Tuesday

Time : 10:00 AM-12:00 PM

Date : 24-01-2023

W-25411-2022

Max. Marks : **40**

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- 1) There are Three sections as follows:
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|---------------------------------------|----------|
| 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. Write about X-ray generators.
2. Write about electric motors.
3. Write in detail about CR system.
4. Write in detail about solid state rectifiers and construction of solid-state rectifiers.

SECTION – C

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

1. What are P- and N-type of semiconductors?
 2. Write in short about auto-transformers.
 3. Write in short about advantages and disadvantages of PACS.
 4. Write a short note on detectors in DR system.
 5. Write a short note on DICOM.
 6. Write in short about following innovations in digital radiography:
 - A. Dual energy imaging
 - B. CAD Software programs
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5. AC to DC conversion is done by?
A. Generator
B. Transformer
C. Motor
D. Rectifier
- A. Voltage supply to the tube is controlled by?
A. Transformer
B. Motor
C. Generator
D. Rectifier
6. mA in the X-ray tube is measured by?
A. Voltmeter
B. Milli-ammeter
C. Rectifier
D. Secondary coil of transformer
7. Protection against overloading the circuit of X-ray tube is provided by?
A. Generator
B. Voltmeter
C. Ammeter
D. Circuit-breaker
8. Developing solution contains:
A. Hydroquinone
B. Metol
C. Both
D. None
9. A Cathode is a
A. Positive electrode
B. Negative electrode
C. Neutral electrode
D. None of the above
10. What is the current phosphor of choice for input phosphor in fluoroscopy?
E. Europium Halide
F. Zinc- cadmium sulphide
G. Cesium Iodide
H. Gadolinium oxysulfide

Total Marks Obtained: _____

Signature of Invigilator:

Signature of Examiner:
