

B.Sc. (Radiology & Imaging Technology) Sem-VI (CBCS-2019 Course) Summer-2022
SUBJECT:-Quality Assurance in Radio Imaging

Day : Tuesday
Date : 02-08-2022

Time: -
Max. Marks: 20

S-22551-2022

N.B.

- 1) There are three sections as
Section-A= Objective Type questions - 20 marks.
Section-B= Long Answer questions - 20 marks.
Section-C=Short Answer questions - 20 marks.
- 2) Section A is given in **SEPARATE** sheet and has to be answered on the same sheet. This sheet should be completed within the first 20 minutes of the Supervisor.
- 3) Section B has three long questions and **ANY TWO** questions have to be answered.
- 4) Section C has six short questions and **ANY FOUR** questions have to be answered.
- 5) You have to make such kind of mark in the box of the appropriate answers.

Seat NO.: _____

SECTION-A

M.C.Q.

- 1) X-rays are
 - a) Stream of electrodes
 - b) Stream of positively charged particles
 - c) Electromagnetic radiations of high frequency
 - d) Stream of uncharged particles
- 2) X-rays are discovered by
 - a) Becquerel
 - b) Roentgen
 - c) Marie Curie
 - d) Von Lane
- 3) Photographs made with x rays are known as
 - a) X-graphs
 - b) Gamma-graphs
 - c) Radiographs
 - d) Scanned graphs
- 4) In photo-chemical process, the rays which provide better resolution are
 - a) Infrared
 - b) Visible Light
 - c) UV light
 - d) X-rays

P.T.O.

- 5) Electronic Portal Imaging Device (EPID) in radio-therapy is used for
- a) Treatment planning
 - b) Treatment verification
 - c) CT simulation
 - d) Conventional simulation
- 6) Lymphatics of breast drain into
- a) Posterior intercostal lymph nodes
 - b) Axillary lymph nodes
 - c) Internal mammary lymph nodes
 - d) All of the above
- 7) TLD stands for?
- a) Thermo Luminescent Dosimeter
 - b) Top level domain
 - c) Thermo dosimeter
 - d) All of the above
- 8) In radiology department, walls are coated with
- a) Lead
 - b) Glass
 - c) Tungsten
 - d) Iron
- 9) Contrast used for MRI
- a) GDPA
 - b) Radium
 - c) Iridium
 - d) TDT
- 10) Ionizing Radiation have
- a) Short wavelength / high frequency
 - b) Short wavelength / short frequency
 - c) Long wavelength / high frequency
 - d) Long wavelength / short frequency

Total marks obtained: _____

Signature of Invigilator: _____

Signature of Examiner: _____

* * * *

Day : Tuesday
Date : 2/8/2022

S-22551-2022

Time : 10:00 AM-12:00 PM
Max. Marks : 40

N.B.

- 1) There are three sections as
Section-A= Objective Type questions - 20 marks.
Section-B= Long Answer questions - 20 marks.
Section-C=Short Answer questions - 20 marks.
- 3) Section B has three long questions and **ANY TWO** questions have to be answered.
- 4) Answer to both the sections should be written in **SAME** answer book.

SECTION-B

Long answer (attempt **ANY TWO**) (20)

- 1) Discuss briefly the PCPNDT Act.
- 2) Discuss the safety precautions which should be followed while working in radiology department.
- 3) Discuss briefly various radiation protection devices.

SECTION-C

Short answer (attempt **ANY FOUR**) (20)

- 1) Waiting time in radiology.
- 2) Patient privacy in radiology and its importance.
- 3) Inspection and storage of lead aprons.
- 4) Importance and monitoring of TLD badges.
- 5) Enlist any five condition for which a critical value alert is sounded in MRI.
- 6) Effects of Radiation.

* * * *