Rajiv Gandhi University of Health Sciences, Karnataka

I Year M.Sc. Medical Imaging Technology - 12-Dec-2022

[Time: 3 Hours] **[Max. Marks: 80]**

Radiographic Procedure and Principles of Radiographic Exposure
Q.P. CODE: 9541

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

Answer All The Questions **08 X 10 = 80 Marks**

1. Discuss the indications, contraindications and technique of Enteroclysis.
2. Discuss in detail the techniques of bariumenema, indications and contraindications.
3. Discuss in detail about the process of X-ray production.
4. Automatic film processor.
5. Radiographic projections of a) TM joint b) Shoulder
6. Write a note on contrast media.
7. Layout of darkroom.
8. Radiographic projections for acute abdomen.

I Year M.Sc Medical Imaging Technology - 14-Dec-2022

Time: 3 Hours **Max. Marks: 80**

INSTRUMENTATION OF CONVENTIONAL X-RAY EQUIPMENTS AND INSTRUMENTATION OF SPECIALIZED RADIOLOGY EQUIPMENTS
Q.P. CODE: 9542

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

Answer All The Questions **08 X 10 = 80 Marks**

1. Define rectification. Explain different types of rectifiers in detail with diagram.
2. Write about CR and DR
3. Mobile X-Ray equipment.
4. Remote control X-ray table.
5. Grid controlled X-ray tube.
6. Write note on digital fluoroscopy.
7. Ionization timers.
8. Cones and cylinders.

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I Year M.Sc. Medical Imaging Technology - 16-Dec-2022

[Time: 3 Hours] **[Max. Marks: 80]**

Advanced Technique and Instrumentation of Ultrasonography
Q.P. CODE: 9543

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

Answer All The Questions **8 X 10 = 80 Marks**

1. Doppler imaging.
2. Design of Transducers, also add a note on Piezoelectric effect.
3. 3D imaging, also add a note on contrast agents in ultrasound.
4. Quality maintenance in ultrasound.
5. Short note on PCPNDT Act.
6. Echo detection and signal processing.
7. Interventional ultrasound.
8. Protocol for lower limb arterial doppler.

I Year M.Sc. Medical Imaging Technology Degree Examination - 19-Dec-2022

Time: 3 Hours **Max. Marks: 80**

ADVANCED TECHNIQUE AND INSTRUMENTATION OF COMPUTED TOMOGRAPHY
Q.P. CODE: 9544

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

Answer All The Questions **08 X 10 = 80 Marks**

1. Discuss briefly the factors affecting the patient’s dose.
2. CT Perfusion.
3. CT Pulmonary angiography.
4. Discuss CT artefacts.
5. Care, maintenance and quality assurance of CT scanner.
6. Pediatrics CT protocol.
7. Write about note on 3D computed tomography scanner in detail.
8. HRCT protocol for temporal bone.