Rajiv Gandhi University of Health Sciences, Karnataka

I Year M.Sc Medical Imaging Technology Degree Examination - 04-May-2026

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 indication, contraindication and technique of enteroclysis.
2. Discuss in detail mammography technique.
3. Dark room layout.
4. ERCP.
5. Technique involved in Barium meal follow through.
6. Explain sailography in details.
7. Explain the routine and supplementary view of Hand.
8. Water's view.

I Year M.Sc Medical Imaging Technology Degree Examination - 06-May-2026

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 **8 X 10 = 80 Marks**

1. Describe filament circuit with a labelled diagram and enumerate its importance
2. Rectification and types
3. Enumerate the difference between medium and high frequency generators with diagram
4. Classify timer circuits and elaborate different types
5. Classify grids and explain the working mechanism of grids including types and movement
6. Digital Fluoroscopy
7. Explain the principle of tomography and give examples where modalities use tomographic principles with working mechanism
8. Why high – tension transformer is connected to anode and filament transformer is connected to cathode in X-Ray circuit. Explain in detail

****

Rajiv Gandhi University of Health Sciences, Karnataka

I Year M. Sc Medical Imaging Technology Degree Examination - 08-May-2026

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. Vendors and current trends of ultrasound
2. Echo detection and signal processing
3. Real time ultrasound scan
4. Define contrast media. Explain in detail about ultrasound contrast agent
5. Ultrasound in OBG
6. Ophthalmic ultrasound and elaborate the probe used for this study
7. Ultrasound image display modes
8. USG Controls

******

I Year M.Sc. Medical Imaging Technology Degree Examination - 11-May-2026

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. Describe in detail about advances in detector technology
2. Describe the image quality in single slice and multi slice helical CT scan
3. **CT Enterography**
4. Discuss in detail about 3D and 4D CT imaging
5. CT Bronchoscopy
6. Patient preparation for CT Coronary Angiography
7. Patient radiation dose considerations in Helical CT
8. CT Documentaion