Rajiv Gandhi University of Health Sciences, Karnataka

II Year M. Sc Medical Imaging Technology - 05-May-2026

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

ADVANCED TECHNIQUE AND INSTRUMENTATION OF MRI
Q.P. CODE: 9545

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. Explain flow phenomena and their compensation techniques.
2. Write a note on inversion recovery imaging. Mention the importance of inversion recovery sequence in brain imaging.
3. What is EPI? Explain the use of EPI in clinical MRI. Mention the list of fast imaging techniques in MRI.
4. Write a note on diffusion weighted imaging
5. Write a note on balanced gradient echo.
6. Write a note on cardiac gating.
7. Classify MR contrast agents and their applications.
8. Write a note on safety precautions in MRI.

II Year M. Sc Medical Imaging Technology - 07-May-2026

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

INTERVENTIONAL RADIOLOGY TECHNIQUES
Q.P. CODE: 9546

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. Non-neuro interventional procedures done in cathlab. Describe one.
2. Explain about the room design of interventional radiology.
3. Discuss about hepato Biliary intervention.
4. Types of guide wires used in interventional radiology and its uses
5. Digital Subtraction Angiography
6. Emergency drugs and equipment’s used in intervention radiology
7. Vertebroplasty
8. Techniques used for sterilization of equipment’s

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year M. Sc Medical Imaging Technology - 12-May-2026

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

CARE OF PATIENTS IN DIAGNOSTIC RADIOLOGY
Q.P. CODE: 9547

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. Write a note on Nosocomial infection
2. Write the radiation safety measures for patient in radiology department
3. Patient care during gastrointestinal tract investigation
4. Write a note in needle stick injury and disposal of sharp needles
5. What is Medico-legal cases? Write the legal responsibility of imaging technologist
6. Precautions to be taken by imaging technologist prior to IV contrast administration
7. **Write a note in psychological consideration when dealing with patient mortality and morbidity.**
8. Explain the importance of communication and patient education in health care facility

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II Year M. Sc Medical Imaging Technology - 14-May-2026

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

Radiation Evaluation and Protection in Diagnostic Radiology
Q.P. CODE: 9548

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. Explain Deterministic and Stochastic effects of radiation
2. Write a note on technical protective consideration in CT scan
3. Filtration and its types in detail
4. Explain the Biological Effects of radiation
5. Write a note on radiation measuring devices
6. Write a note on Radiation Signages
7. Explain Primary Barrier and Secondary Barrier of radiation
8. Write in detail about design and structural shielding in a X-Ray room

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year M. Sc Medical Imaging Technology - 12-May-2026

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