Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Radiography Degree Examination – MAR/APR 2017

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

IMAGING TECHNIQUE INCLUDING US / CT/ MRI / NUCLEAR

Q.P. CODE: 2209

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

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Describe in detail the different MR flow techniques.
2. Write in detail about the principles and types of ultrasound transducers.
3. What are contrast media? How do you classify them? Mention the adverse effects.

SHORT ESSAYS (Answer any Eight) **8 x 5 = 40 Marks**

4. CT artifacts
5. Precautions to be taken while handling Radiopharmaceuticals
6. Patient positioning in computed tomography
7. Write a note on the safety considerations of ultrasound.
8. Write a note on the production of Radionuclides.
9. Write a brief note on Interventional CT guided procedures.
10. Pixel and Voxel
11. SPECT
12. Write a note on Radio Immuno Assay.

SHORT ANSWERS **10 x 2 = 20 Marks**

13. Acoustic coupling media
14. Aliasing artefact
15. Ultrasound phantoms
16. Contrast to Noise Ratio
17. Gamma camera
18. Pin hole collimator
19. Shimming
20. Modes of ultra sound
21. Window width and window level
22. Ray projections

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III Year B.Sc. Radiography Degree Examination – APRIL 2017

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

RADIOGRAPHIC TECHNIQUES – II

Q.P. CODE: 2210

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

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Describe the procedure in detail of Lumbar myelography under the following headings:
   a) Indications and contraindications
   b) Preparation of the patient
   c) Techniques
   d) Trolley settings
   e) After care of patient
2. Describe and discuss the immobilization techniques used in Radiography.
3. Discuss in detail of Endoscopic Retrograde Cholangio Pancreatography (ERCP).

SHORT ESSAYS (Answer any Eight) **8 x 5 = 40 Marks**

4. Compare between the PA and AP of the skull radiography
5. Cysto-urethrography
6. Lower limb venography
7. Magnification Radiography
8. Per-operative Cholangiography
9. Small Bowel Enema
10. Sialography
11. Shoulder Arthrography
12. Sinography
13. List-out the emergency drugs used in Radiology department.

SHORT ANSWERS **10 x 2 = 20 Marks**

14. Use of Pig tail Catheters
15. Foley's Catheter
16. Ten Day Rule
17. Asepsis
18. Bucky Radiography
19. Soft tissue Radiography
20. Positive contrast media
21. List-out any four emergency equipments used in Radiology department.
22. Micro radiography
23. High KV Chest Radiography

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Radiography Degree Examination – SEP-2017

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

IMAGING TECHNIQUE INCLUDING US / CT/ MRI / NUCLEAR

Q.P. CODE: 2209

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

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. What are MR Pulse sequences? Mention briefly the basic pulses used in imaging.
2. Write a detail regarding Position Emission Tomography (PET).
3. Write in detail about Ultrasound Instrumentation. Mention briefly about the display modes – A Mode, B Mode, M Mode, Real Time.

SHORT ESSAYS (Answer any Eight) **8 x 5 = 40 Marks**

4. Principles involved in Tracer techniques
5. MR Artifacts
6. Pixel and Voxel
7. Fourth generation CT scanner
8. Temporal and spatial resolution in Nuclear imaging
9. Window level and window width
10. Write a note on Radio Active Transformations.
11. What are the different Doppler methods?
12. Different types of arrays used in Ultrasound transducers

SHORT ANSWERS **10 x 2 = 20 Marks**

13. Acoustic impedance
14. Piezoelectric effect
15. CT motion artifacts
16. SHIM coils
17. Signal to Noise ratio
18. CT Number
19. Slip rings
20. Faradays cage
21. MR safety
22. Precautions while handling Radio nuclides

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Radiography Degree Examination – SEP 2017

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

RADIOGRAPHIC TECHNIQUES – II
Q.P. CODE: 2210

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

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Describe in detail about Conventional Angiography.
2. Describe the following radiological procedures: Intravenous Choledochography, Pre-Operative Choledochography and Post-Operative Choledochography.
3. Describe Hysterosalphingography.

SHORT ESSAYS (Answer any Eight) **8 x 5 = 40 Marks**

4. Describe excretion urography.
5. Briefly discuss Myelography.
6. Bronchography
7. Radiation protection
8. Seldinger technique
9. Methods of localizing foreign bodies
10. Explain briefly about the High Kilo Voltage Technique.
11. Enteroclysis
12. Micturition Cysto Urethrography
13. Generations of Computed tomography

SHORT ANSWERS **10 x 2 = 20 Marks**

14. Stereography
15. Pedal lymphography
16. Ventriculography
17. Arthrography
18. Pressure injector
19. Special projection for mammography
20. Vesiculography
21. Fallopian tube recanalization
22. LD_{50}
23. Adverse reactions of contrast media

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