Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Imaging Technology Examination – May 2016

Time: Three Hours | Max. Marks: 60 Marks

DIAGNOSTIC IMAGING TECHNIQUE (RS – II)

Q.P. CODE: 2911

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. Write a note on Ultrasonographic imaging – modes, physics, transducers, artefacts, contrast and safety considerations.
2. CT imaging of lung – patient positioning, indications, CECT and HRCT thorax and pulmonary image reconstruction techniques
3. Enumerate the principle on which a CT scan machine works. What is MDCT?

SHORT ESSAYS (Answer any Five) 5 x 5 = 25 Marks

4. Radiopharmaceuticals and their uses
5. MR image quality
6. MR angiography
7. Ultra sound artefacts
8. DSA
9. Piezoelectric crystal
10. Quality check and maintainance of CT

SHORT ANSWERS (Answer any Five) 5 x 3 = 15 Marks

11. MR contrast agents
12. CT number
13. Partial volume artefact in CT
14. Precession
15. CT contrast agents
16. Triple phase CT
17. Specific activity

Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Imaging Technology Examination – May 2016

Time: 3 Hours Max. Marks: 30 Marks

Radiographic Technique - I

Q.P. Code : 2912

Your answers should be specific to the questions asked. Draw neat labeled diagrams wherever necessary
(Note : Both QP Codes 2912 and 2913 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) 1 x 10 = 10 Marks

1. Write in detail procedure, precaution, position of radiographs in neck injury cases.
2. Supplementary views for chest region.

SHORT ESSAYS (Answer any Two) 2 x 5 = 10 Marks

3. Routine radiography of knee joint
4. Radiography of acromioclavicular joint
5. Scapula various views & projections

SHORT ANSWERS (Answer any Five) 5 x 2 = 10 Marks

6. Radiographic views for thoracic spine
7. Soft tissue neck radiography
8. Apicogram
9. Preparations for KUB region radiograph
10. Hand radiograph
11. Towne's view

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Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Imaging Technology Examination – MAY 2016

Time: 3 Hours Max. Marks: 30 Marks

Radiographic Technique - II

Q.P. Code: 2913

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

(Note: Both QP Codes 2912 and 2913 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) 1 x 10 = 10 Marks

1. Describe sialography under the following headings:
   a) Indication and contraindication
   b) Preparation of the patient
   c) Procedure
   d) Trolley settings
   e) After care of the patient
2. Describe Intravenous urography through in adult under the following headings:
   a) Indication and contraindication
   b) Preparation of the patient
   c) Contrast media
   d) Procedure including recommended views
   f) After care of the patient

SHORT ESSAYS (Answer any Two) 2 x 5 = 10 Marks

3. Small Bowel Enema
4. Oral cholecystography
5. Percutaneous Transluminal Angioplasty

SHORT ANSWERS (Answer any Five) 5 x 2 = 10 Marks

6. Positive contrast media
7. Bronchography
8. Stereography
9. Peripheral venography
10. CT myelography
11. Contrast media used in MRI

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Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Imaging Technology Examination – AUG/SEP 2016

Time: Three Hours Max. Marks: 60 Marks

DIAGNOSTIC IMAGING TECHNIQUE (RS – II)

Q.P. CODE: 2911

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 various pulse sequences used in MRI.
2. What are radiopharmaceuticals? Describe in detail their preparation and handling precautions.
3. Discuss in detail the ultrasound instrumentation and display modes.

SHORT ESSAYS (Answer any Five) 5 x 5 = 25 Marks

4. Pixel and Voxel
5. Single Photon Emission Computed Tomography (SPECT)
6. MRI Artifacts
7. Position Emission Tomography
8. Transducer
9. Gradient coils
10. MR Angiography

SHORT ANSWERS (Answer any Five) 5 x 3 = 15 Marks

11. Larmor frequency
12. Radionuclides
13. Rectilinear scanner
14. Multihole collimator
15. Ultrasound contrast media
16. CT Console
17. Radiofrequency receiver (MRI)

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Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Imaging Technology Examination – SEP -2016

Time: 3 Hours Max. Marks: 30 Marl

Radiographic Technique - I

Q.P. Code: 2912

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

(Note: Both QP Codes 2912 and 2913 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) 1 x 10 = 10 Marks

1. Describe the routine and supplementary views of cranium.
2. Describe the routine and supplementary views of knee joint.

SHORT ESSAYS (Answer any Two) 2 x 5 = 10 Marks

3. A patient wearing cervical collar comes for radiological examination of cervical spine. In situation, what projection should be done first and state the reason for it?
4. Sterno-clavicular joint
5. Carpal tunnel view

SHORT ANSWERS(Answer any Five) 5 x 2 = 10 Marks

6. Von Rosen's view
7. AP view of Leg
8. Ball catcher view
9. Posterior oblique of Lumbar spine
10. PA view of Mandible
11. Apicogram

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Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Imaging Technology Examination – SEP -2016

Time: 3 Hours | Max. Marks: 30 Marks

Radiographic Technique - II

Q.P. Code : 2913

Your answers should be specific to the questions asked. Draw neat labeled diagrams wherever necessary
(Note : Both QP Codes 2912 and 2913 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any One) 1 x 10 = 10 Marks

1. Discuss in detail the technique of peripheral venography.
2. Describe in detail the emergency equipment and emergency drugs in radiology deparment.

SHORT ESSAYS (Answer any Two) 2 x 5 = 10 Marks

3. Hypotonic duodenography
4. Percutaneous nephrostomy
5. Sinograms and fistulograms

SHORT ANSWERS (Answer any Five) 5 x 2 = 10 Marks

6. Intra-osseous venography
7. Duplication radiography
8. Pelvimetry
9. Micturating cystourethrography
10. T-Tube cholangiogram
11. lithotripsy

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