Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Imaging Technology Examination – MARCH 2018

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 pulmonary angiography and image reconstruction techniques.
3. Enumerate the principle of MRI.

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

4. Multiple detector CT
5. Radioactivity
6. Construction of tc 99m generator
7. Side lobe and grating lobe artifacts
8. Paramagnetic substances
9. Detector pitch and collimator pitch
10. Types of magnets used in MRI

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

11. Cold kit
12. Radiofrequency coil and gradient coil
13. Contrast to noise ratio and signal to noise ratio
14. Gyromagnetic ratio
15. Ct contrast agents
16. Pixel and Voxel
17. Window width and window level

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III year B.Sc. Imaging Technology Examination – MARCH 2018

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. Describe the radiographic technique used in chest radiography.
2. Write in detail radiographic projections used for Scaphoid fracture.

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

3. Routine and special projections for radiographic evaluation of cranium.
4. Routine and special projections for radiographic evaluation of lumbo sacral junction.
5. Radiographic views of optic foramina

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

6. Apicogram
7. Frog leg view
8. Mastoid view
9. Radiography of ankle
10. Radiographic projections for TM joint
11. Radiography to view free air in abdomen

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Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Imaging Technology Examination – MARCH 2018

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. Preparation and procedure for excretory urography
2. Emergency equipments in radiology department

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

3. Emergency drugs
4. Barium meal follow through
5. Bronchography

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

6. Small bowel enema
7. Lumbar myelography
8. Peripheral venography
9. Macro radiography
10. Forensic radiography
11. Duplication radiography

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III year B.Sc. Imaging Technology Examination – SEP-2018

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. Write in detail about principles of tracer technique.
3. Explain in detail about slip ring technology used in computed tomography

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

4. Precautions while handling radionuclides
5. 2D and 3D imaging in CT
6. Shimming and its types
7. Subtraction angiography
8. MR image quality
9. Helical CT
10. Pixel and voxel

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

11. Precession
12. CT contrast agents
13. Partial volume artefact in CT
14. T1 weighted image
15. Contrast reaction
16. Properties of sonic waves
17. CT number

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Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Imaging Technology Examination – SEP-2018

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. Discuss in detail radiography of lumbo sacral spine.
2. Discuss in detail radiography of knee joint.

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

3. Radiation protection
4. Lordotic view
5. Skyline view

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

6. Temporo mandibular joint
7. Optic foramen view
8. Ten day rule
9. Extra oral x ray
10. Schuller's view
11. Mortise view

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III year B.Sc. Imaging Technology Examination – SEP-2018

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 Intravenous urography in adults under the following headings:
   a) Indications and contraindications
   b) Preparation of the patient
   c) Contrast media
   d) Procedure including recommended views
   e) Aftercare of the patient
2. Describe the procedure and indications of Hysterosalpingography (HSG).

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

3. Small bowel enema
4. Pelvimetry and vesiculography
5. Sinography

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

6. Crash cart
7. Bronchography
8. Loopogram
9. Stereography
10. Conventional mammography
11. Apicogram

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