Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Imaging Technology Examination – April 2014

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 physical principles of Computed Tomography
2. Discuss the physical principles of Ultrasonography
3. Describe any two sequences used in MRI

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

4. Ultrasound artifacts
5. Colour Doppler
6. High resolution sonography
7. Positron Emission Tomography
8. Window width and window level
9. Pitch
10. Gradient coils

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

11. Slip ring Technology
12. Ultrasound Contrast media
13. PNDT Act
14. Bowel Preparation for Abdominal ultrasound
15. Resistive index
16. Pressure Injector
17. CT guided biopsies

Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Imaging Technology Examination – September 2014

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 briefly principles, pulse sequences, situation recovery, and inversion recovery.
2. Write briefly technique of flow, MRA, spectroscopy.
3. Write essay on Doppler methods – continuous wave Doppler, pulse Doppler, real time colour flow imaging.

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

4. MRI contrast agents.
5. Contrast materials & admission in CT scan.
6. Interventional CT guided procedures.
7. Safety dose and radiation dose in CT scan.
8. Quality assurance tests in CT scan.
9. Image quality in MRI – briefly mention about noise ratio, contrast to noise ratio.
10. Subtraction angiography

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

11. Rectilinear scanner
12. Radiopharmaceuticals and their preparation
13. Tracer techniques in nuclear medicine
14. Basic diagnostic aspects in ultrasound
15. Display modes – A mode, B mode, M mode, real time.
16. Acoustic coupling media
17. Patient preparation and handling in ultrasound.

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Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Imaging Technology Examination – April 2014

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 x-ray interaction with matter.
2. Write briefly on radiation hazards and protection.

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

3. Bucky tray
4. Lead goggles
5. Decubitus view in pleural effusion

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

6. Waters view
7. Cones and cylinders
8. Optic foramen view
9. Anode heel effect
10. Teleroentgenography
11. Tunnel's view

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Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Imaging Technology Examination – September 2014

Time: 3 Hours Max. Marks: 30 Ma

Radiographic Technique - I

Q.P. Code: 2912

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

(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 hand.
2. Describe the routine and supplementary views of abdomen.

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

3. Compare between AP and PA of skull radiography.
4. A patient comes for radiological examination of neck of femur, what projection should be done and explain?
5. Intervertebral formina

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

6. Judet's view
7. Axil view of calceneum
8. Nasal bones
9. AP view of Dorsal spine
10. Lateral view of Larynx
11. AP view of Scapula

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Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Imaging Technology Examination – April 2014

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 about retrograde urography
2. Discuss the technique of double contrast Barium Enema

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

3. Contrast study of C T abdomen
4. Ten day rule
5. Emergency drugs in radiology department

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

6. Ultra sound probes
7. Perihaeral venography
8. Renal arteriogrpahy
9. Negative contrast medias
10. Bronchography
11. Duodonography

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Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Imaging Technology Examination – September 2014

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 pulse sequences used in MRI.
2. Discuss in detail the technique of lumbar myelogram.

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

3. Nephrostomogram
4. Use of digital substraction angiography
5. Sialography

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

6. Non – ionic contrast media
7. Tomography
8. Mammography
9. OPG
10. Fistulography
11. HSG

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