Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Radiography Degree Examination – MARCH 2018

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 Doppler principle in detail and discuss colour Doppler and continuous wave Doppler in detail.
2. Discuss MR contrast media in detail.
3. Discuss gamma camera in detail.

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

4. Discuss types of magnets used in MRI.
5. Radioimmunoassay
6. MR angiography
7. Explain briefly intra-voxel dephasing and its compensation technique.
8. SPECT data acquisition
9. Radio-pharmaceuticals
10. Power Doppler
11. Ultrasound artefacts
12. Explain in detail Chemical Misregistration and Aliasing artefacts.

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

13. CT numbers
14. Diffusion weighting imaging
15. MRCP
16. Inversion recovery
17. Beam hardening artefact
18. T2 weighting
19. Radionuclides
20. Larmor frequency
21. HRCT
22. Piezo electric effect

Rajiv Gandhi University of Health Sciences, Karnataka

*****

III Year B.Sc. Radiography Degree Examination – MARCH 2018

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. What is an Upper G.I Barium Study? Discuss any one procedure of performing the examination in a 40 year old patient.
2. Describe and discuss the procedure in performing a Cysto-urethrogram study to demonstrate Vesico-Ureteric Reflux.
3. How will you perform a Renal Angiogram? Discuss the filming sequence.

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

4. Technique of Spleno-portography
5. Percutaneous transhepatic Cholangiography
6. Bronchography
7. Sinography of a sinus in the perianal region
8. Cerebral angiography
9. Digital Radiography
10. Large Bowel Enema
11. Percutaneous transluminal angioplasty
12. Endoscopic Retrograde Cholangio Pancreatography (ERCP)
13. Mammography

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

14. Angiography Catheters
15. Urinary Catheters
16. Radiation protection in females
17. Sterilization of instruments used in X-Ray procedures
18. Tele-Roentgenography
19. Lymphography
20. Stereography
21. Dental Radiography
22. Myelography
23. Computer Radiography

*****

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Radiography Degree Examination – SEP-2018

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 M.R. contrast agents. Write their uses.
2. Describe briefly physics of Doppler and different methods of Doppler imaging.
3. Describe in detail methods of image reconstruction in C.T., Explain briefly C.T. artifacts.

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

4. M.R. spectroscopy.
5. Real time ultrasound.
6. Spiral C.T.
7. Ultrasound artifacts.
8. Advantages of M.R.I. study.
9. Spin echopulse sequences.
10. Radio-active cobalt.
11. Gradient coils.
12. Interventional C.T. guided procedures.

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

13. A-mode ultrasound.
14. Gamma rays.
15. Window level in C.T.
16. Time of Repitition (TR).
17. Velocity of sound.
18. Line density and framerate in U.S.(ultrasound).
19. Curie.
20. Offset frequency in M.R.I.
21. Pixel.
22. Decibel.

*****

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Radiography Degree Examination – SEP-2018

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 Lithotripsy.
2. Describe in detail about Barium meal follow through.
3. Describe in detail special projections of mammography.

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

4. Mammography
5. Intravenous urogram
6. PTC
7. Cerebral catheters
8. Foreign body localization
9. Bronchography
10. Mobile radiography
11. Asepsis
12. Tenday rule
13. Sinography

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

14. Adverse effects contrast media
15. T-Tube cholangiography
16. Barium enema
17. Percutaeneous renal puncture
18. ERCP
19. Contrast administration techniques
20. Gynacography
21. Ventriculography
22. Guide wire and types
23. Lumbar discography

*****