#### SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

**B.Sc. Allied Health Sciences Third Year (Semester-V)** 

September/October -2018 Examination

**B.Sc. Imaging Technology (IMT)** 

Time : 2.30 Hrs.

Paper – I

**Diagnostic Imaging Techniques** 

# Q.P Code : AHS-119

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

#### LONG ESSAY

- Classify CT contrast agents. Add a note on the dose, various routes of administration and Management of contrast reactions.
- 2. Discuss in detail the principle and working of gamma camera.

## SHORT ESSAY (Answer any Six)

- 3. Artifacts encountered in MR imaging.
- 4. Magnetic resonance spectroscopy.
- 5. Slip ring Technology.
- 6. Precautions while handling radiopharmaceuticals.
- 7. Cyclotron.
- 8. Explain about image reconstruction in CT.
- 9. Inversion recovery sequences.
- 10. Interventional CT guided Procedures.

#### SHORT ANSWERS (Answer any Ten)

- 11. Shim coils.
- 12. Rectilinear scanner.
- 13. Window level and window width.
- 14. Signal to noise ratio (NR).
- 15. Types of collimators.
- 16. Patient positioning in computed tomography.
- 17. QA in magnetic resonance imaging.
- 18. Radioactivity.
- 19. Structure of atom.
- 20. Write any three advantages of radioisotope scan.
- 21. What is low dose CT.
- 22. Volume rendering.

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2 X 10 = 20 Marks

[Max. Marks : 80]

6 X 5 = 30 Marks

10 X 3 = 30 Marks

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Paper – II

**Radiographic Techniques-I** 

Q.P Code : AHS-120

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

#### LONG ESSAY

- 1. Describe the various views used in radiography of knee joint.
- 2. Explain in detail about ten day rule.

### SHORT ESSAY (Answer any Six)

- 3. Mass Miniature Radiography.
- 4. Explain Barium Swallow.
- 5. Discuss about HSG prepration and procedures.
- 6. Discuss the views used in radiography of foot.
- 7. Oblique view of mandible.
- 8. Uses of DSA.
- 9. Explain the preparation and procedure of barium enema.
- 10. Explain the air gap technique.

## **<u>SHORT ANSWERS</u>** (Answer any Ten)

- 11. Explain the artifacts of MRI.
- 12. Explain about Ionic and Non Ionic contrast.
- 13. Gynaecography.
- 14. Contrast media reactions.
- 15. Principles of computed tomography.
- 16. Radio isotope scanning.
- 17. Explain about double contrast study.
- 18. TLD dosimetry.
- 19. Small Bowel Enema.
- 20. Explain Stenver's view.
- 21. Vesiculography.
- 22. Emergency drugs used in radiology department

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2 X 10 = 20 Marks

10 X 3 = 30 Marks