

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)

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

October - 2016 Examination
B.Sc. Imaging Technology (IMT)

Time : 2.30 Hrs.

[Max. Marks : 80]

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

2 X 10 = 20 Marks

1. Basic principles of PET.
2. Describe an ultrasound transducer with adequate diagram. Enumerate various types of transducers.

SHORT ESSAY (Answer any Six)

6 X 5 = 30 Marks

3. Radiation dose in PET.
4. Artefacts in USG.
5. Interactions of ultrasound waves with matter.
6. Basic diagnostic effects in PET.
7. Diagnostic procedures in USG.
8. Characteristics of sound.
9. SPECT
10. Instrumentation of USG.

SHORT ANSWERS (Answer any Ten)

10 X 3 = 30 Marks

11. Grey scale imaging.
12. Pulsed doppler.
13. Mechanical arrays.
14. Depth resolution in USG.
15. Patient preparation and handling in PET.
16. Piezoelectric effect.
17. Acoustic coupling media.
18. Quality assurance tests in PET.
19. Healing.
20. B mode in ultrasound.
21. Transducer sterilization.
22. Real time Doppler.

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Paper – II

Radiographic Techniques-II

Q.P Code : AHS-120

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

LONG ESSAY

2 X 10 = 20 Marks

1. Write briefly about relevant radiological technique, views, projections required under following clinical disorders
 - a) acid peptic disease/ ca stomach
 - b) small bowel disorders
2. Write in detail about adverse reactions to contrast media and patient management in shock, emergency drugs and equipment required in radiology department.

SHORT ESSAY (Answer any Six)

6 X 5 = 30 Marks

3. Role of hypotonic Duodenography.
4. Retrograde urethrography.
5. Complications in lumbar myelography.
6. Aseptic measures in radiological procedures.
7. Radiation safety.
8. HSG.
9. Transfemoral arteriography.
10. MRI pulse sequences.

SHORT ANSWERS (Answer any Ten)

10 X 3 = 30 Marks

11. Ultrasound scanning for biliary tract.
12. Small bowel enema.
13. Percutaneous lung biopsy.
14. Use of contrast media in IVP.
15. Tomography.
16. Catheterization sites and asepsis.
17. Lithotripsy.
18. Radio-Isotope scanning.
19. CSF rhinorrhea imaging.
20. Hepatic venography.
21. MRI in stroke imaging.
22. High kilo voltage technique.