

B.Sc. NUCLEAR MEDICINE TECHNOLOGY
SECOND YEAR
PAPER III – NUCLEAR MEDICINE TECHNIQUES AND
SPECIAL PROCEDURES

Q.P. Code: 802113

Time: Three Hours

Maximum: 100 Marks

Answer All questions

I. Elaborate on:

(3 x 10 = 30)

1. The pathology of Bone disease with indications for Bone scan, patient preparation and radiotracer dosage with their administration for Bone scan.
2. The anatomy and physiology of brain with conventional brain scans, indications and radiotracers used.
3. In vitro nuclear medicine techniques used to estimate T3, T4 and TSH.

II. Write Notes on:

(8 x 5 = 40)

1. Parathyroid scintigraphy.
2. Stress myocardial perfusion study.
3. Comparison of renal tubular and cortical agents.
4. ^{99m}Tc RBC tagging procedures.
5. Nuclear medicine procedure for thyroid malignancy.
6. Compartmental analysis in Radionuclide studies.
7. Lung ventilation study.
8. Interventional drugs used in scintigraphic studies.

III. Short Answers on:

(10 x 3 = 30)

1. Vitamin B₁₂ absorption studies.
2. Ejection fraction calculation.
3. Standard curve in RIA.
4. Nuclear medicine procedure for Biliary atresia.
5. Radioimmunotherapy.
6. Venography.
7. Protein loss studies.
8. Survival curves.
9. Use of ECG in NM cardiac studies.
10. Au 198 application.
