

B.Sc. NUCLEAR MEDICINE TECHNOLOGY

THIRD YEAR

PAPER I – RECENT ADVANCE IN NUCLEAR MEDICINE TECHNIQUES

Q.P. Code: 802121

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. PET MRI principles. Will it replace PET CT? Compare PET MRI and PET CT.
2. Advanced tracers in PET imaging of Heart.
3. Newer computer applications in nuclear medicine.

II. Write notes on:

(8 x 5 = 40)

1. Translational imaging.
2. PACS.
3. Telemedicine.
4. PET brain tracers.
5. What is F -18 sodium fluoride used for imaging? Compare with MDP.
6. F -18 FDG mechanism of localisation in cancer cell.
7. SPECT CT applications in nuclear medicine.
8. SUV.

III. Short answers on:

(10 x 3 = 30)

1. TOF.
2. Cyclotron produced tracers.
3. F 18 DOPA uses.
4. Liver cancer radiopharmaceuticals for treatment (TARE).
5. Alpha tracers.
6. FDG viability – protocol.
7. Gallium 68 PSMA.
8. PRRT radiopharmaceuticals.
9. RIT.
10. F 18 FCH uses.
