

[LL 0817]

AUGUST 2017

Sub. Code: 2112

B.Sc. NUCLEAR MEDICINE TECHNOLOGY
SECOND YEAR
PAPER II – RADIOCHEMISTRY AND RADIO PHARMACY

Q.P. Code: 802112

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Discuss various factors that should be considered in the labeling procedure.
2. Write the principle of Radionuclide Generator and Construction of Column Generator.
3. Explain RBC cell labeling with Tc99m.

II. Write notes on:

(8 x 5 = 40)

1. Explain the correct use of Syringes, Pipettes, Balance and Centrifuge.
2. Describe Biochemistry and Immunology.
3. Antigen – Antibody reaction.
4. Sterility check of Radiopharmaceuticals.
5. Explain Lipids and Profiles.
6. Radiochemical purity.
7. Gel chromatography.
8. Ge68–Ga68 Generator system.

III. Short answers on:

(10 x 3 = 30)

1. Explain analytic balance.
2. Explain Specific activity.
3. Normality of Solution.
4. Explain carrier free.
5. Tc99m Phytate.
6. Molecular Structure of Tc99m MDP.
7. Difference of Solute and Solvents.
8. What are Buffer Solutions?
9. Excitation Labeling.
10. Gelatin- applications in nuclear medicine.
