

**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 respiratory diseases – indications for scintigraphy – perfusion and ventilation studies, patient preparation, radiotracers used and administration technique.
2. The anatomy and pathological conditions of cardiovascular system, along with the techniques for infarct avid imaging and shunt evaluation.
3. Techniques of Esophageal transit study, Gastro esophageal reflux, Gastric emptying studies and Gastro Intestinal bleeding scintigraphy.

**II. Write Notes on:**

**(8 x 5 = 40)**

1. Nuclear medicine procedures for haematological disorders.
2. Hepatobiliary scan.
3. <sup>99m</sup>Tc Sulfur colloid scan.
4. Vesico ureteric reflux study.
5. Lymphoscintigraphy.
6. Radiopharmaceuticals for tumor imaging.
7. Significance of Cardiac cycle in Nuclear Cardiology.
8. Radioiodine therapy for thyrotoxicosis.

**III. Short Answers on:**

**(10 x 3 = 30)**

1. ELISA.
2. Myocardial viability study.
3. T<sub>max</sub> and t<sub>1/2</sub>.
4. First pass study.
5. Intravascular particulate radionuclide therapy.
6. Schilling test.
7. <sup>32</sup>P dosage.
8. Salivary gland imaging.
9. <sup>99m</sup>Tc MIBI scan in Endocrinology.
10. Labelled monoclonal antibodies.

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