

**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY**

[AHS 0122]

**JANUARY 2022  
(OCTOBER 2021 EXAM SESSION)**

**Sub. Code: 2313**

**M.Sc. NUCLEAR MEDICINE TECHNOLOGY  
SECOND YEAR (From 2019-2020 onwards)  
PAPER III – THERAPEUTIC NUCLEAR MEDICINE TECHNIQUES  
*Q.P. Code : 282313***

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. Briefly describe the procedures for administration of 5 mCi <sup>131</sup>Iodine for treatment of hyperthyroidism.
2. Describe the procedure for radiation synovectomy for haemophilia.

**II. Write notes on:**

**(10 x 6 = 60)**

1. Radiopharmaceutical for palliation of painful bone metastases.
2. Personnel monitoring during <sup>177</sup>Lu DOTATATE administration.
3. Calibration procedure for dose calibrator for beta emitters.
4. <sup>186</sup>Re.
5. Radiation safety procedure for <sup>131</sup>I-MIBG administration for diagnostic study.
6. Post therapy imaging.
7. Design of radionuclide administration room for therapy procedures.
8. Disposal of radioactive waste.
9. Transport index.
10. Accidental spill of radioactive material.

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