

**NUCLEAR MEDICINE**

**PAPER-III**

Time: 3 hours  
Max. Marks:100

NM/J/20/24/III

**Important Instructions:**

- *Attempt all questions in order.*
- *Each question carries 10 marks.*
- *Read the question carefully and answer to the point neatly and legibly.*
- *Do not leave any blank pages between two answers.*
- *Indicate the question number correctly for the answer in the margin space.*
- *Answer all the parts of a single question together.*
- *Start the answer to a question on a fresh page or leave adequate space between two answers.*
- *Draw table/diagrams/flowcharts wherever appropriate.*

**Write short notes on:**

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|-----|---|-----|
| 1.  | Management of differentiated thyroid cancer in children.  | 10  |
| 2.  | a) Bone scan findings in metabolic bone diseases.<br>b) Salivary scintigraphy and its indications.  | 5+5 |
| 3.  | a) Protocol for administration, acute and chronic adverse effects and management in PRRT for Neuroendocrine tumors.<br>b) Give protocols for nephro-protection. | 6+4 |
| 4.  | a) Role of nuclear medicine in LV dyssynchrony.<br>b) Pharmacological stress MPI – agents used, protocols and mechanism of action.                              | 5+5 |
| 5.  | a) PET/CT imaging in epilepsy.<br>b) TRODAT SPECT/CT imaging  | 5+5 |
| 6.  | What are the common causes of leg edema? Discuss scintigraphic findings in a case of lymphedema.  | 5+5 |
| 7.  | Role of PET-CT in gynecological malignancies.   | 10  |
| 8.  | a) Scope of nuclear medicine in neonatal hyperbilirubinemia.<br>b) Interventions in renal scintigraphy for renal artery stenosis.                               | 5+5 |
| 9.  | Define pseudo-progression and hyper-progression. Discuss the evolving role of FDG PET/CT in response evaluation of immunotherapy.                               | 10  |
| 10. | Indications, contraindications, protocol and procedure of Trans-Arterial Radio-Embolization (TARE).   | 10  |

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