

NUCLEAR MEDICINE
PAPER-IV

TIME: 3 HOURS
MAX. MARKS: 100

NM/J/18/24/IV

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:

1. Scope of alpha emitters in therapeutic nuclear medicine. 10
2. Role of PSMA PET/CT in the management of prostate cancer. 10
3. a) PET Guided Biopsy- reality or hype? 5+(2.5+2.5)
b) FES and Exendin 4 PET/CT
4. Compare Rhenium-186 vs Rhenium-188 and describe Tungsten 188 – Rhenium 188 generator system. 5+5
5. Latest ATA guidelines in the management of differentiated thyroid cancer 10
6. a) PET imaging of Lung Carcinoids and NEC of Lungs. 5+5
b) Strategy of management of peptide receptor radionuclide therapy (PRRNT) for Atypical Carcinoid.
7. a) PET as a diagnostic tool in infection. 5+5
b) Hypoxia imaging is dead or still useful tool?
8. a) CZT Cardiac Cameras 5+5
b) Coronary flow reserve – techniques and clinical usefulness
9. a) Applications of Cu-64 radiotracers. 5+5
b) C-11 radiotracers and their clinical usefulness.
10. ¹³¹I-MIBG as diagnostic and therapeutic radiopharmaceutical – Current scenario. 10
