

**NUCLEAR MEDICINE**

PAPER – II

NM/J/15/24/II

Time : 3 hours

Max. Marks : 100

**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. a) PET myocardial perfusion tracers 5+5  
b) Radionuclide assessment of RV function
2. a) Radio-colloids and their applications 5+5  
b) Peritoneal scintigraphy
3. a) Enumerate the causes of painful limp in a child. 4+6  
b) Role of skeletal scintigraphy in the differential diagnosis.
4. a) <sup>11c</sup> PIB. 2.5x4  
b) <sup>18</sup>F- Choline  
c) <sup>18</sup>F-FLT  
d) <sup>99m</sup>Tc EC
5. Role of PET-CT in: 5+5  
a) Ca rectum.  
b) Sarcoidosis.
6. a) Role of Nuclear Medicine in reflux nephropathy. 5+5  
b) Role of USG in the evaluation of thyroid nodule.
7. Critically analyse the role of V/Q scan and CT pulmonary angiogram in the evaluation of pulmonary thromboembolism. 10
8. a) <sup>99m</sup>Tc N-NOET. 4+6  
b) QC tests for FDG.
9. Detail the methods of limiting exposures to: 3+4+3  
a) Occupational workers.  
b) Patients.  
c) General Public.
10. a) ROC. 2.5x4  
b) Student 't' test.  
c) Bayesian analysis.  
d) Inter & intra observer reliability.

\*\*\*\*\*