



## **NUCLEAR MEDICINE**

### **PAPER – IV**

NM/D/14/24/IV

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. Attenuation correction principles in PET/MR. 10
2. Quality control procedures in PET scanner. 10
3. Critically analyze the current indications of PET/CT and PET/MR in Head and Neck cancers. 10
4. Positron Emission Tomography in prostate cancer evaluation. 10
5. New developments in skeletal imaging. 10
6. Role of PET in differentiating stunned myocardium from hibernating myocardium. 10
7. a) LSO vs BGO crystal  
b) APD vs SiPM 5+5
8. Recent developments in New software for nuclear cardiology applications. 10
9. Role of Nuclear Medicine in the investigation of fever of unknown origin (FUO). 10
10. Newer developments in radiopharmaceuticals for bone pain palliation. 10

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