

**NUCLEAR MEDICINE**

PAPER – IV

NUC.MED/APRIL/16/24/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. a) Principles of MR imaging.  | 7+3 |
| b) Indications of PET/MR in oncology.  |     |
| 2. Detection of low-grade glioma using radionuclide imaging.   | 10  |
| 3. Role of nuclear medicine imaging in management of cases of PUJ obstruction both in adults and children. | 10  |
| 4. Salient features of ATA 2015 Guidelines for Differentiated thyroid cancer.                              | 10  |
| 5. Role of nuclear medicine techniques in Ca ovary.  | 10  |
| 6. a) Familial MTC   | 5   |
| b) Functional pancreatic NET   | 5   |
| 7. a) CT dose index (CTDI)   | 5   |
| b) Attenuation correction in PET/MR.   | 5   |
| 8. Compare and contrast amyloid imaging and Tau imaging in dementias.                                      | 5+5 |
| 9. a) Hippocampal sclerosis.   | 5   |
| b) Hemimegalencephaly  | 5   |
| 10. Post radioiodine patient release guidelines - India vs USA.  | 5+5 |

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