

**RADIODIAGNOSIS**

PAPER – IV

RDG/APRIL/16/40/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) Positioning and technique for apicogram. 5+5  
b) Magnification radiography.
2. a) Principles of radiation protection. 4+(3+3)  
b) Define various radiation units and give maximum permissible dose for radiation workers.
3. a) MR spectroscopy in breast. 5+5  
b) MR spectroscopy in prostate.
4. Indications, contraindications and technique of intra-arterial thrombolysis for acute stroke. 3+3+4
5. a) Role of CT perfusion in hepatic tumors. 5+5  
b) Role of CT perfusion in pancreatic tumors.
6. a) Iso-osmolar contrast agents. 3+3+4  
b) Classify MR contrast agents.  
c) Nephrogenic systemic fibrosis.
7. Radiological evaluation of skeletal maturity for bone age estimation. 10
8. Role of radionuclide imaging in renal disorders. 10
9. a) PET-MR 5+5  
b) MR guided interventions.
10. Role of perfusion and diffusion MRI in post chemotherapy evaluation. 5+5

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