

RADIODIAGNOSIS

PAPER – IV

RDG/D/15/40/IV

Time : 3 hours

Max. Marks : 100

IMPORTANT INSTRUCTIONS

- *This question paper consists of 10 questions divided into Part 'A' and Part 'B', each part containing 5 questions.*
- *Answers to questions of Part 'A' and Part 'B' are to be strictly attempted in separate answer sheet(s) and the main + supplementary answer sheet(s) used for each part must be tagged separately.*
- *Answers to questions of Part 'A' attempted in answer sheet(s) of Part 'B' or vice versa shall not be evaluated.*
- *Answer sheet(s) of Part 'A' and Part 'B' are not to be tagged together.*
- *Part 'A' and Part 'B' should be mentioned only on the covering page of the respective answer sheet(s).*
- *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.*

PART A

Write short notes on:

1. a) What is scatter radiation? How does it affect radiographic image quality? (1+2)+7
b) Methods to reduce scatter radiation.
2. a) Enumerate the types of digital radiography. Describe each one briefly. 4+6
b) Advantages and limitations of digital radiography compared with conventional film screen radiography.
3. a) Principles and techniques of dual energy CT. (3+3)+4
b) Clinical applications of dual energy CT.
4. Principles and techniques of ultrasound elastography along with its clinical applications. 2+4+4
5. a) Define contrast induced nephropathy (CIN). 1+(5+4)
b) Conditions predisposing to CIN and the precautions to be taken to avoid CIN.

P.T.O.