

M.D. (Radiodiagnosis) : WINTER - 2018
**SUBJECT: PAPER – I: BASIC SCIENCES, RADIATION PHYSICS,
IMAGING TECHNIQUES**

Day: Saturday
Date: 01/12/2018

Time: 2.00 P.M. TO 5.00 P.M
Max Marks. 100

W-2018-3543

N.B.

- 1) Q. No. 1 and Q. no. 2 are **COMPULSORY**.
 - 2) Attempt any **SEVEN** questions from Q. no. 3 to Q. No. 10.
 - 3) Figures to the right indicate **FULL** marks
 - 4) Draw neat and labelled diagrams **WHEREVER** necessary.
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- Q.1** Define principles of radiation protection. Describe various parameters which can reduce patient radiation dose in radiography and fluoroscopy. **(15)**
- Q.2** Enumerate different types of contrast media, their adverse reactions and management. **(15)**
- Q.3** PACS. **(10)**
- Q.4** What are the indications for a triple phase CT study? How would you perform the study on the CT scanner in your department? **(10)**
- Q.5** Radiography of PNS. **(10)**
- Q.6** Penile Doppler. **(10)**
- Q.7** Describe the embryology and development of pancreas. Describe the imaging features of any one important congenital anomaly of the pancreas. **(10)**
- Q.8** Define contrast induced nephropathy (CIN). What are the conditions predisposing to CIN and the precautions to be taken to avoid CIN. **(10)**
- Q.9** TLD. **(10)**
- Q.10** Side effects of Gadolinium compounds. **(10)**

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