

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Sc. (Radiotherapy Technology) (Sem.-6)
RADIATION PROTECTION AND MONITORING

Subject Code : BSRT-608-19

M.Code : 91770

Date of Examination : 14-07-22

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Write briefly :

- a) What is cancer induction?
- b) What is exposure?
- c) What is effective dose?
- d) What is the principle of PD device?
- e) Define x-ray shielding.
- f) What is organ malformation?
- g) What is shielding barrier?
- h) What is Maze design?
- i) What are the genetic effects of radiation?
- j) Write the advantages of PD devices.

SECTION-B

2. Delayed or late effects of radiation.
3. Write about the lethal effect.
4. Write about the Personal dosimetry devices.
5. Discuss the attenuation by a shield with build up and without build up.
6. What are the various factors used in shielding calculations of secondary barrier?

SECTION-C

7. Describe about the natural and human made radiation source.
8. Describe the solid state detector *i.e.* (TLD) in detail with characteristic of various phosphorus material.
9. Write a short note on :
 - a) X-ray shielding
 - b) Particle shielding.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.