Roll No. | | | | | | | | | | | | **Total No. of Pages : 02**

Total No. of Questions : 09

B.Sc. (Radiotherapy Technology) (Sem.–3)

BASIC RADIOTHERAPY PHYSICS

Subject Code : BSRT303-19

M.Code : 78482

Date of Examination : 19-12-22

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 are photons?

b. Enlist any four properties of X-rays.

c. Who discovered neutrons and protons?

d. Enlist any four parameters of dosimetry.

e. Differentiate between supper voltage and megavoltage.

f. Enlist any four sources of radiotherapy.

g. What is Sc and Sp?

h. What is Backscatter factor?

i. What is SAD technique?

j. Define tissue maximum ratio.

SECTION-B

2. Write a brief note on orthovoltage.

3. Write a note on quality and intensity of gamma rays.

4. Describe various sources used in radiotherapy.

5. Write a detailed note on percentage dose depth.

6. Describe the physics of neutrons in radiotherapy.

SECTION-C

7. Highlight briefly the important historical aspects in radiotherapy.

8. Describe the physics of electrons and protons in radiotherapy.

9. Write a detailed note on various dose calculation parameters.

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.