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

Total No. of Questions : 09

B.Sc(Radiotherapy Technology) (Sem.–5)

SPECIAL RADIOTHERAPY TECHNIQUES

Subject Code : BSRT503-19

M.Code :90331

Date of Examination : 16-12-22

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) Elaborate the term IMRT.

b) What do you mean by conformational radiotherapy?

c) Define total body irradiation.

d) Describe the principle of Gamma knife.

e) Describe the term '*asymmetric jaws*' in radiotherapy.

f) What is the principle of X-knife?

g) Define 'SRT' and 'SRS'.

h) Enlist the equipment used in total body irradiation.

i) Define the Ca. medulloblastoma.

j) What do you mean by central shielding?

SECTION-B

2. What are the construction and working of gamma knife?

3. Describe in detail Ca. breast and Ca. medulloblastoma.

4. Write a note on the design and working of MLC and MMLC.

5. Describe the dynamic delivery and helical tomotherapy.

6. Discuss in detail about MIMic based IMRT.

SECTION-C

7. Describe in detail, the principle and working of asymmetric jaws in radiotherapy.

8. What do you mean by 3DCRT? Describe the steps involved in treatment planning.

9. Write a comprehensive note on the principle, construction and working of X-knife.

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.