

Roll No.

Total No. of Pages : 02

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B.Sc. (Radiotherapy Technology) (Sem.-4)

**PRINCIPLES OF RADIOTHERAPY PLANNING AND TECHNIQUES**

Subject Code : BSRT-402-19

M.Code : 79716

Date of Examination : 07-07-22

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) Define GTV Cold Spot.
- b) Expand SSD technique.
- c) Define Brachytherapy.
- d) What is palliative therapy?
- e) When should a zero or a negative rake be used?
- f) Which kind of filter is used in radiation therapy and why?
- g) What is meant by wedge angle?
- h) What is integral dose?
- i). Define Benign tumour.
- j) Expand IMRT.

## SECTION-B

2. Differentiate between Gamma Knife and Linac- based radiotherapy.
3. Write a note on total body irradiation.
4. Explain the role of tissue compensators.
5. Briefly, describe Arc therapy.
6. What is MLC? Mention it's advantages and disadvantages.

## SECTION-C

7. Elaborate the application of Radiotherapy in malignant tumour conditions.
8. Describe the role of stimulators in the treatment of cancer patient.
9. Explain the radiological techniques used to treat patient with breast cancer.

**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.**