

Roll No.

Total No. of Pages : 02

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

**RADIATION QUANTITIES, UNITS AND
DETECTION/MEASUREMENT**

Subject Code : BSRT-403-19

M.Code : 79717

Date of Examination : 11-07-22

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) Flux
- b) Roentgen
- c) Exposure dose
- d) G.M. Counters
- e) Principle of Scintillation detector.
- f) Applications of detectors
- g) Kerma dose
- h) Advantages of detectors
- i) Fluorescence
- j) Radiation.

SECTION-B

2. Discuss relationship between absorbed dose and equivalent dose.
3. Write a brief note on Phosphorescence.
4. Discuss dose limit for public.
5. Describe detection and measurement of radiation by Fluorescence.
6. Write a short note on natural background radiation.

SECTION-C

7. Discuss the principle, working of liquid scintillator counter.
8. Write a note on types of scintillator used and its principle and working.
9. Write a brief note on Ionisation chamber.

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.