

Seat No.: _____

Enrolment No. _____

PARUL UNIVERSITY
DEPARTMENT OF PARAMEDICAL AND HEALTH SCIENCES
B.Sc. Med. Sci., April – 2023 Examination.

Year: 2

Date: 05/04/2023

Subject Code: 19111203

Time: 10:00am to 10:45am

Subject Name: RD MOD-3 Equipment of Radiotherapy

Total Marks: 30

Instructions:

1. Attempt all questions from each section
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.

- Q.1: Definition (any 5 out of 6) (Each 1 Mark) 05 marks**
- (i) What radiation source is used in Tele gamma Machine
 - (ii) What radiation source is used in Remote after loading system
 - (iii) Define isocenter
 - (iv) What is LINAC
 - (v) Nominal Energy used in Accelerator for Treatment
 - (vi) What Dosimetry system used in Brachytherapy
- Q.2: Short question (any 5 out of 6) (Each 2 Mark) 10 marks**
- (i) Define Radiotherapy
 - (ii) Define Collimator
 - (iii) What is simulator and why it is used
 - (iv) Explain about Brachytherapy
 - (v) What is bending magnet and where it will be located
 - (vi) Define Styrofoam cutting System
- Q.3: Long question (any 3 out of 4) (Each 5 Mark) 15 marks**
- (i) What is linear accelerator explain in detail
 - (ii) Explain about Tele Gamma Radiotherapy machine
 - (iii) Discuss about Klystron
 - (iv) Difference between Tele Radiotherapy and Brachytherapy