

[LE 0414]

APRIL 2014

Sub. Code:4032

**M.Sc (MEDICAL PHYSICS) - DEGREE EXAMINATION
SECOND YEAR
CLINICAL RADIATION BIOLOGY**

Q.P. Code: 284032

Time: 3 hours

maximum: 100 marks

I. Elaborate on:

(2X20=40)

1. Define Linear Quadratic Model. Write an essay on Models in Radiobiology.
2. Somatic effects of radiation. What are all the effects of chronic exposure to radiation.

II. Write notes on:

(10X6=60)

1. Time dose fractionation
2. NTCP
3. Diagnosis and Management of oesophageal cancers
4. Percentage labeled mitosis technique
5. Hyperthermia
6. Cell metabolism
7. Point Mutations
8. Cell survival curves
9. Target theory
10. Tissue tolerance dose
