

[LP 1019]

OCTOBER 2019

Sub. Code: 4017

M.Sc. MEDICAL PHYSICS DEGREE EXAMS
FIRST YEAR
PAPER VII – PHYSICS OF RADIATION THERAPY

Q.P. Code : 284017

Time : Three hours

Maximum : 100 marks

I. Elaborate on :

(2 x 20 = 40)

1. Describe in detail, construction and working of the medical linear accelerator.
2. Describe in details about the brachytherapy technique and dosimetry system.

II. Write notes on:

(10 x 6 = 60)

1. Pin-Are.
2. Merits of Linear Accelerator over Cobalt 60 teletherapy machine.
3. X-ray simulator.
4. Betatron.
5. Derive the relationship between TAR and PDD.
6. Dynamic wedge.
7. Clarkson technique for irregular field.
8. Explain the ICRU 50.
9. Describe general guideline for patient position.
10. Neutron capture theory.
