

[LN 1018]

OCTOBER 2018

Sub. Code: 4015

M.Sc. MEDICAL PHYSICS DEGREE EXAMS

FIRST YEAR

PAPER V – RADIATION DETECTORS AND INSTRUMENTATION

Q.P. Code : 284015

Time : Three hours

Maximum : 100 marks

I. Elaborate on :

(2 x 20 = 40)

1. Explain the characteristics of Gas Filled detectors and discuss in detail about ion chamber, proportional counter and G-M Counter.
2. Describe the construction of Radiation Field Analyzer and its applications.

II. Write notes on:

(10 x 6 = 60)

1. Optically Stimulated Luminescence Dosimeter (OSLD).
2. Radiochromic film as a detector.
3. Integrated Circuits (ICs).
4. Condenser Chamber.
5. Pocket dosimeter.
6. Film Badge.
7. Switch Mode Power Supply (SMPS).
8. Contamination Monitor.
9. Well Type Ion Chamber.
10. NaI Scintillator.
