

[LL 0817]

AUGUST 2017

Sub. Code: 5004

B.Sc. MEDICAL LABORATORY TECHNOLOGY

FIRST YEAR

PAPER IV – PHYSICS & PRINCIPLES OF INSTRUMENTATION

Q.P. Code: 725004

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on: **(3 x 10 = 30)**

1. What are the types of microscope and elaborate note on compound microscope?
2. Write a note on spectrophotometer with its applications in the laboratory.
3. Explain the principle and its applications of pH meter.

II. Write notes on: **(8 x 5 = 40)**

1. Differentiate between Transverse and Longitudinal waves.
2. Give a brief of semiconductor and oscillators.
3. Incubator.
4. Thermocouple.
5. Aberration of lenses.
6. Write a note about AC & DC current.
7. UPS.
8. Gamma Chambers.

III. Short answers on: **(10 x 3 = 30)**

1. Ionizing radiation.
2. Isotopes used in medicine.
3. OHM's Law.
4. Fuse.
5. Electrolysis.
6. Stabilizer.
7. Thermometer.
8. Define critical angle.
9. Define Mass and Volume.
10. Types of charged particle with example.
