

**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. Describe the principle of fluorescent microscope and explain in details about each part of the fluorescent microscope.
2. Give an Elaborate note on spectrophotometer.
3. Describe about radiation personnel monitoring devices used in hospital.

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

1. Water Bath.
2. Refrigerator.
3. Osmosis.
4. Rectifier.
5. Filter.
6. What is ionizing radiation and give three examples?
7. Kinetic theory of gases.
8. Centrifuge.

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

1. Define – Wave length.
2. What is Stabilizer?
3. Charle's law.
4. Define mass and volume.
5. GM counter.
6. Define – Current, Voltage.
7. pH meter.
8. What is Ultrasound?
9. Specific gravity.
10. Thermometer.

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