

[LM 0218]

FEBRUARY 2018

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 refrigerators and its application in medical field?
2. Write in detail about the principle of calorimetry and techniques used in medical laboratory.
3. What are the types of transformer and its application in medical instruments?

II. Write notes on:

(8 x 5 = 40)

1. Septic gravity and its uses.
2. Photo electric emission.
3. Distillation apparatus.
4. Hot air oven.
5. Types and its uses of centrifuges.
6. Calorimeter.
7. Application Laws of Thermodynamics.
8. Thermostat.

III. Short answers on:

(10 x 3 = 30)

1. Osmotic pressure.
2. Phase contrast microscope.
3. Advantages of earthing and fuses in electrical connections.
4. Define Reflection, Refraction and Critical angle.
5. Define Velocity and Frequency.
6. Calorific values of food.
7. Define Diffusion and Osmosis.
8. Define Mass and Volume.
9. OHM's Law.
10. Fuse.
