

**DIPLOMA IN OPERATION THEATRE & ANAESTHESIA TECHNOLOGY/
DIPLOMA IN CRITICAL CARE TECHNOLOGY**

FIRST YEAR

PAPER I – ANATOMY, PHYSIOLOGY & BIOCHEMISTRY

Q.P. Code: 841101

Time : Three Hours

Maximum : 100 Marks

Answer All questions.

I. Elaborate on:

(3 x 10 = 30)

1. Draw the structure of a cell and label it. Explain in detail about various cell organelles.
2. Describe in detail about the electrical activity of the heart. Add a note on Electrocardiogram.
3. Enzymes-definition, nomenclature and classification.

II. Write notes on:

(10 x 5 = 50)

1. Functions of vitamin K.
2. Describe about menstrual cycle.
3. Hormones secreted by adrenal gland and their function.
4. Draw and explain the structure of femur.
5. Protein metabolism.
6. Physiology of respiration.
7. Difference between Kwashiorkor and Marasmus.
8. Draw the diagram of the nephron and marks the parts.
9. Functions of CSF.
10. Essential fatty acid.

III. Short answers on:

(10 x 2 = 20)

1. List down the steps of digestion process.
2. Stroke volume.
3. Define basal metabolic rate.
4. Protein energy malnutrition.
5. Define pH.
6. Anatomical planes.
7. Draw the structure of ear.
8. Any three functions of haemoglobin.
9. Write the meaning of endocytosis and exocytosis.
10. Vital capacity.
