## DIPLOMA IN OPERATION THEATRE & ANAESTHESIA TECHNOLOGY/

**Sub.Code: 1101** 

## DIPLOMA IN CRITICAL CARE TECHNOLOGY FIRST YEAR

## PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code: 841101

Time: Three Hours Maximum: 100 Marks

**Answer ALL questions** 

I. Elaborate on:  $(3 \times 10 = 30)$ 

1. Explain Humerus with a) Presenting parts b) Muscle attachment c) Side determination d) Applied anatomy and e) Blood supply

- 2. Write in detail about Cardiac Output and Factors influencing it.
- 3. Classify Proteins and write its functions in detail.

II. Write notes on:  $(10 \times 5 = 50)$ 

- 1. Thoracic vertebrae.
- 2. Micturition.
- 3. Muscles of Thorax.
- 4. Functions of a) Cell membrane b) Mitochondria c) Golgi apparatus
- 5. Enzyme inhibition.
- 6. Functions of Blood.
- 7. Lung Volumes and Muscles of Inspiration.
- 8. Write briefly about a) Calcium b) Vitamin B12.
- 9. Hypertension.
- 10. Functions of Insulin and Glucagon and their disorders.

## III. Short answers on:

 $(10 \times 2 = 20)$ 

- 1. Define Tachycardia and Bradycardia.
- 2. Anatomical planes.
- 3. ESR.
- 4. Respiratory quotient.
- 5. Depolarisation of Nerves.
- 6. Alkalosis.
- 7. Classify Nervous system.
- 8. Bleeding time and Clotting time.
- 9. Partial pressure of Carbon dioxide.
- 10. Define a) pH b) Buffers.