

**DIPLOMA IN CRITICAL CARE TECHNOLOGY  
SECOND YEAR**

**PAPER I – APPLIED ANATOMY AND PHYSIOLOGY**

*Q.P. Code : 841211*

**Time : Three Hours**

**Maximum : 100 Marks**

**Answer All questions.**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Define Cardiac cycle, explain the various stages of cardiac cycle.
2. Draw and label the diagram of Respiratory system and describe the Mechanism of Respiration.
3. Define Blood pressure. Explain the factors regulating blood pressure.

**II. Write notes on:**

**(10 x 5 = 50)**

1. Pain pathway.
2. Lung volumes and capacity.
3. Acid base balance.
4. Circle of Willis.
5. Chambers of the Heart.
6. Diaphragm.
7. ABO blood grouping.
8. Bronchopulmonary segments.
9. Electrocardiogram.
10. Erythropoiesis.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Define Alkalosis.
2. Name the parts of brain stem.
3. Name the layers of the blood vessel.
4. Hypoxia.
5. Valves of the Heart.
6. Cough reflex.
7. Hemothorax.
8. Lobes of the liver.
9. Name the bones forming thoracic cage.
10. Pacemaker of the heart.