

**B.Sc. RESPIRATORY THERAPY**  
**FIRST YEAR**  
**PAPER I – ANATOMY AND PHYSIOLOGY**

*Q.P. Code: 802601*

**Time: Three Hours**

**Maximum: 100 Marks**

**Answer all questions**

**I. Elaborate on:** **(3 x 10 = 30)**

1. Explain in detail about the chambers of the heart with neat diagram.
2. Describe in detail about the Bronchopulmonary segments with a neat diagram.
3. Explain in detail about O<sub>2</sub> transport and oxygen dissociation curve.

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

1. Lung volumes and Capacities with a well labeled diagram.
2. Chemical regulation of respiration.
3. Baroreceptors and its role in regulation of Blood pressure.
4. Electrocardiogram and its uses.
5. Diaphragm its attachment, nerve supply and its role in respiration.
6. Pleura and pleural recesses.
7. Venous drainage of heart.
8. Surface marking of the boundaries of the heart.

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

1. List the causes of obstructive and restrictive lung disorders.
2. Define compliance.
3. Surfactant and its functions.
4. Define Cardiac output. What is its normal value?
5. Define hypoxia. Name the types of hypoxia.
6. Boundaries and divisions of mediastinum.
7. Arch of aorta and its branches.
8. Name the paranasal sinuses.
9. Trachea.
10. Angina pectoris.

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