

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. Describe the situation, external features and chambers of the heart in detail with a suitable diagram.
2. Describe the neural and chemical regulation of respiration.
3. Describe the parts of the pleura, pleural recesses and its functions. Add a note on its applied anatomy.

II. Write notes on:

(8 x 5 = 40)

1. Secretion, functions and disorders affecting surfactant.
2. Oxygen haemoglobin dissociation curve.
3. Ventricular action potential.
4. Draw an ECG and mark the different waves.
5. Write the differences between right and left lung.
6. Describe the blood supply of the heart.
7. Describe the bronchopulmonary segments.
8. Describe the attachment, nerve supply and actions of diaphragm.

III. Short answers on:

(10 x 3 = 30)

1. List the causes for obstructive and restrictive lung diseases.
2. Define vital capacity. Give its normal value.
3. List the different layers of the respiratory membrane.
4. Give the normal values for blood pressure, pulse rate and respiratory rate.
5. List the factors affecting cardiac output.
6. Name the cavities of the larynx.
7. Name the coverings of the heart.
8. Name the branches of arch of aorta.
9. Name the intercostal muscles.
10. Name any 3 paranasal sinuses.