

[AHS 0321]

## MARCH 2021 Sub. Code: 2601 (AUGUST 2020 EXAM SESSION)

B.Sc. RESPIRATORY THERAPY FIRST YEAR (Regulation 2014-2015)

PAPER I – ANATOMY AND PHYSIOLOGY Q.P. Code: 802601

Time: Three hours Answer ALL Questions Maximum: 100 Marks

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

1. Draw a diagram and describe the external features of the heart. Add a note on its blood supply.

- 2. Describe the attachments, openings with structures passing through, nerve supply and actions of the diaphragm.
- 3. Discuss the transport of oxygen from the lungs to the tissues.

II. Write notes on:  $(8 \times 5 = 40)$ 

- 1. Conducting system of heart.
- 2. Bronchopulmonary segments.
- 3. Discuss the physiology of the normal electrocardiogram (ECG).
- 4. Interior of right ventricle.
- 5. List the various lung volumes and capacities.
- 6. Discuss the mechanics of breathing.
- 7. Describe the chemical control of respiration.
- 8. Discuss the role of the baroreceptors in maintaining blood pressure.

## III. Short answers on:

 $(10 \times 3 = 30)$ 

- 1. Parietal pleura.
- 2. Surface marking of lungs.
- 3. Describe the maxillary air sinus.
- 4. What is the effect of parasympathetic stimulation to the heart?
- 5. What is meant by REM Sleep?
- 6. List the cause of the first and second heart sounds.
- 7. What is meant by pulse pressure?
- 8. What are the accessory muscles of respiration?
- 9. What is meant by the term compliance of the lung?
- 10. What is meant by the term hypoxia? Give two causes.

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