THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0423] APRIL 2023 Sub. Code: 2601

B.Sc. RESPIRATORY THERAPY FIRST YEAR (Regulations 2014-2015 & 2018-2019 onwards) Paper I – ANATOMY & PHYSIOLOGY

Q. P. Code: 802601

Time: Three hours Maximum: 100 Marks

Answer ALL Questions

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

- 1. Describe the Blood supply and Nerve supply of the Heart with suitable diagram.
- 2. Explain Diaphragm under the following subdivisions:
 - (a) Origin
- (b) Insertion
- (c) Blood supply
- (d) Nerve supply

- (e) Action
- (f) Orifices present
- (g) Structures passing through it

- (h) Applied anatomy.
- 3. How is the process of Respiration Regulated? Add a note on Periodic Breathing.

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

- 1. Difference between the Right Ventricle and Left Ventricle.
- 2. Pleural recesses and Functions of Pleura.
- 3. Tracheobronchial tree.
- 4. Surface marking of Lungs.
- 5. Conducting system of Heart.
- 6. Secretion, functions and disorders affecting Pulmonary surfactant.
- 7. Airway resistance, compliance and work of breathing.
- 8. Hypoxia and its types.

III. Short answers on:

 $(10 \times 3 = 30)$

- 1. Define Mediastinum and mention the structures present in it.
- 2. Tracheostomy.
- 3. Name the branches of Arch of Aorta.
- 4. Structures seen in Nasopharynx.
- 5. Inter atrial septum.
- 6. List the forms in which Oxygen is transported in the Blood.
- 7. List the factors affecting Cardiac output.
- 8. REM sleep.
- 9. Define Vital capacity. Give its Normal value.
- 10. Location and functions of Baroreceptors.
