## BACHELOR IN PROSTHETICS AND ORTHOTICS FIRST YEAR PAPER II – PHYSIOLOGY

Q.P. Code: 802452

Time: Three Hours Maximum: 100 Marks

**Answer All questions** 

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

1. List the different descending tracts. Describe the origin, course, termination and functions of the pyramidal tracts.

- 2. Describe the various events that occur during the cardiac cycle.
- 3. With the help of a diagram, describe the different lung volumes and capacities.

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

- 1. Describe the mechanics of breathing.
- 2. What is an action potential? Describe with a diagram.
- 3. Describe the structure of skeletal muscle.
- 4. Describe the different mechanisms of transport across the cell.
- 5. List the different White blood cells (WBCs) with their functions.
- 6. Describe the micturition reflex.
- 7. Describe the action of insulin. Add a note on Diabetes mellitus.
- 8. Describe the functions of skin.

## III. Short answers on: $(10 \times 3 = 30)$

- 1. List the functions of the kidney.
- 2. List the functions of the cerebellum.
- 3. What is meant by the following terms?
  - (a) Apnoea
- (b) Tachypnoea
- 4. What is hypertension?
- 5. What is the normal RBC count?
- 6. What are the functions of platelets?
- 7. What is meant by muscle fatigue?
- 8. What is meant by anemia? Give two causes.
- 9. What is referred pain?
- 10. What is lymph? What are the functions of lymph?

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