[LJ 0816]

AUGUST 2016

Sub. Code :2402

B.Sc. PROSTHETICS AND ORTHOTICS

FIRST YEAR

PAPER II – PHYSIOLOGY

Q.P. Code: 802402

Answer All questions

Maximum: 100 Marks

I. Elaborate on:

Time: Three Hours

- 1. List the various structure present in a cell with one function of each structure.
- 2. Describe the various events that occur in the cardiac cycle.
- 3. Describe the secretion, action and regulation of insulin. Add a note on diabetes mellitus.

II. Write notes on:

- 1. Micturition reflex.
- 2. Describe the different lung volumes with the help of a diagram.
- 3. List the functions of the hypothalamus.
- 4. What is meant by the term "muscle tone"? Define the terms hypotonia, atonia and hypertonia.
- 5. Trace the origin, course, termination and function of the pyramidal tract.
- 6. Coagulation pathways of blood.
- 7. Classify white blood cells. List the functions of white blood cells.
- 8. Describe the structure of the neuromuscular junction.

III. Short answers on:

- 1. Functions of the kidney.
- 2. What is hypoxia? List one condition that can cause hypoxia.
- 3. List the muscles involved in respiration.
- 4. Functions of skin.
- 5. Types and functions of neuroglia.
- 6. Describe the composition and functions of lymph.
- 7. What is a motor unit?
- 8. Functions of plasma proteins.
- 9. Define blood pressure. What is the normal blood pressure?
- 10. Functions of the respiratory system.

$(10 \times 3 = 30)$

$(8 \times 5 = 40)$

 $(3 \times 10 = 30)$