

[AHS 0321]

MARCH 2021

Sub. Code: 2452

(AUGUST 2020 EXAM SESSION)

BACHELOR IN PROSTHETICS AND ORTHOTICS**FIRST YEAR (Regulation 2017-2018)****PAPER II – PHYSIOLOGY*****Q.P. Code : 802452*****Time: Three hours****Answer ALL Questions****Maximum: 100 Marks****I. Elaborate on:****(3 x 10 = 30)**

1. List the various ascending sensory tracts and describe the pathway for pain.
2. With the help of a diagram, describe the structure of the cell.
3. What are the different white blood cells present in the blood and what are their functions? What is immunity?

II. Write notes on:**(8 x 5 = 40)**

1. Describe the micturition reflex.
2. What is hypoxia? What are the different types of hypoxia? How can this be treated?
3. Describe the conducting system of the heart.
4. What is the normal value of blood pressure? What are the factors that determine blood pressure?
5. Describe the functions and actions of insulin.
6. Describe how oxygen and carbon-dioxide are transported in the blood?
7. Describe the structure and function of skin.
8. Describe an action potential with the help of a diagram.

III. Short answers on:**(10 x 3 = 30)**

1. List the functions of the hypothalamus.
2. Define muscle tone.
3. What is meant by the following terms?
(a) Dyspnea (b) Orthopnea
4. What is the effect of the sympathetic and parasympathetic nervous system on the heart?
5. What is the normal RBC count?
6. What are the functions of platelets?
7. What is meant by packed cell volume (PCV)?
8. What is meant by the term Resting Membrane Potential (RMP)?
9. List the different body fluid compartments.
10. List the functions of the kidney.
