USN | | | | | | | | | | **18BT643**

Sixth Semester B.E. Degree Examination, June/July 2023
Human Physiology

Time: 3 hrs.   Max. Marks: 100

Note: *Answer any FIVE full questions, choosing ONE full question from each module.*

Module-1

1   a.   Differentiate between red and white muscle fibers.   **(10 Marks)**
     b.   Illustrate the mechanism of contraction and relaxation of muscle.   **(10 Marks)**

OR

2   a.   Differentiate between Bone and Cartilage.   **(10 Marks)**
     b.   Explain the properties of epithelial tissue and connective tissue.   **(10 Marks)**

Module-2

3   a.   Explain the physiology of digestion.   **(10 Marks)**
     b.   With neat labelled diagram, explain the structure of Nephron? Add a note on its function.
                                                                                (10 Marks)

OR

4   a.   Outline the mechanism of Urine formation.   **(10 Marks)**
     b.   Summarize on digestive glands and the role of enzyme produced by them. **(10 Marks)**

Module-3

5   a.   Explain the transport of respiratory gases in blood.   **(10 Marks)**
     b.   Describe any two cardiovascular disorders.   **(10 Marks)**

OR

6   a.   Construct the steps involved in clothing of blood.   **(10 Marks)**
     b.   Explain the mechanism of breathing in human.   **(10 Marks)**

Module-4

7   a.   Nerve impulse conducts throughout the body. Explain the process of conduction. **(10 Marks)**
     b.   Explain CNS.   **(10 Marks)**

OR

8   a.   Distinguish between CNS and PNS.   **(10 Marks)**
     b.   Sketch and explain the structure of Neuron. Add a note on classification of Neuron based on shape and function. **(10 Marks)**

Module-5

9   a.   Pancreas as endocrine system. Justify.   **(10 Marks)**
     b.   Explain the role of hormones released by anterior pituitary gland.   **(10 Marks)**

OR

10   a.   Explain the role of gonad hormones.   **(10 Marks)**
     b.   Discuss the chemistry, role and disorder relate to thyroid gland hormones. **(10 Marks)**

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