

End Semester (Semester II) Examination July 2022

Programme: Bachelor of Physiotherapy
Subject: Physiology– II & Biochemistry
Subject Code: 23A202
Enrollment No: _____

Full Marks: 70
Time: 3 Hrs.

Section I

- 1. Short Answer type questions. Answer any four.** **4 x 5 = 20**
- Discuss the Genesis of resting membrane potential & Action potential.
 - Contrast the physiology of monosynaptic & polysynaptic reflex.
 - Illustrate the structure and functions of cell organelles.
 - Enumerate Lipid and metabolism of fatty acid.
 - What is BMR? Enumerate the factors affecting BMR.
 - Mention the hormones secreted by pituitary glands and state its function.

Section II

- Long Answer type questions. Answer any three.** **3 x 10 = 30**
- Illustrate the Endocrinology of Male & female reproductive system.
 - Discuss the biochemistry of muscle and its contraction and relaxations.
 - Explicate the Watson & Crick model of DNA.
 - Describe the caloric requirement and computation of balance diet.
 - Discuss the clinical interpretations of the following in human body.
(a) Sugar (b) Creatinine (c) Uric acid (d) Cholesterol

Section III

- Application based questions. Answer any one.** **1 x 20 = 20**
- Explicate the functions of spinal cord, brain stem, cerebellum & basal ganglion.
 - Discuss the biological importance of Translation and inhibitors of protein synthesis.
 - Describe the Neuromuscular junction, structure of the muscle fiber & events of contraction.
 - Contrast between Exocrine and Endocrine System & explain the Tubular function in water excretion.
 - State the functions, dietary sources and clinical manifestation of Fat & water soluble vitamins.
 - State the functions, dietary sources and clinical manifestation of the following.
(i) Iron (ii) Calcium (iii) Fluoride (iv) Sodium (v) Iodine
