

THIRD SEMESTER B.Sc. ZOOLOGY COMPLEMENTARY COURSE

Theory Course- III

PHYSIOLOGY AND ETHOLOGY

Code: ZOL3C03T

[54 hrs] [3 hours/week] [2 credits]

COURSE OUTCOMES [COs]

| COs | Course Outcome Statements |
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| CO1 | Describe the structure of plasma membrane and the various trans-membrane transport mechanisms (3 hrs) |
| CO2 | Enumerate the constituents of normal diet and the mechanism of digestion and absorption of carbohydrates, proteins and lipids and the regulation of gastrointestinal function (4 hrs) |
| CO3 | Explain the mechanism of transport of respiratory gases, control of respiration, respiratory problems and artificial ventilation (6 hrs) |
| CO4 | Explain the structure and working of human heart and mechanism of regulation of heart beat; constituents of human blood and blood transfusion and cardiovascular problems (7 hrs) |
| CO5 | Illustrate the structure of human kidney, the mechanism of urine formation, hormonal control of kidney function and kidney disorders; osmoregulation and urea cycle (6 hrs) |
| CO6 | Enumerate the structure of myofibrils and myofilaments; muscle contractile and regulatory proteins and mechanism of muscle contraction (7 hrs) |
| CO7 | Explain different types of nerve cells and glial cells, maintenance of resting membrane potential, generation and propagation of action potential and synaptic transmission (7 hrs) |
| CO8 | Describe innate behavior, learned behavior, patterns of behavior and factors that affect behavior (8 hrs) |
| CO9 | Enumerate biological rhythms, communication in animals and social organization in mammals (6 hrs) |