

SYLLABUS 2021-2022

CLASS: 11

SUBJECT: BIO_ZOOLOGY (THEORY)

UNITS	CONTENT
1. The Living world	Introduction 1.1 Diversity in the living world 1.3 Taxonomy and systematic 1.4 Three domains of life 1.7 Concept of species 1.8 Tools for study of Taxonomy
2. Kingdom Animalia	Introduction 2.1 Basis of classification 2.1.1 Levels of organization 2.1.2 Diploblastic and Triploblastic organization 2.1.3 Patterns of symmetry 2.1.4 Coelom 2.1.5 Segmentation and Notochord 2.2 Classification of Kingdom - Animalia 2.3 Non - Chordates 2.3.2 Phylum - Cnidaria 2.3.3 Phylum - Ctenophora 2.3.6 Phylum Annelida 2.3.7 Phylum Arthropoda 2.4 Phylum - Chordata 2.4.3 Subphylum - Vertebrata 2.4.4 Class - Cyclostomata 2.4.5 Class - Chondrichthyes 2.4.6 Class - Osteichthyes
3. Tissue level of organization	3.1 Animal Tissues 3.2 Epithelial Tissues 3.3 Connective Tissues
4. Organ and Organ System of Animal	Introduction 4.1 Earth worm 4.3 Frog

5. Digestion and Absorption	<p>Introduction</p> <p>5.1 Digestive System</p> <p>5.1.1 Structure and alimentary canal</p> <p>5.1.2 Histology of the Gut</p> <p>5.1.3 Digestive glands</p> <p>5.2 Digestion of food and role of digestive enzymes</p> <p>5.3 Absorption and assimilation of proteins, carbohydrates and fats</p> <p>5.4 Egestion</p> <p>5.6 Nutritional and digestive Disorders</p>
6. Respiration	<p>Introduction</p> <p>6.1 Respiratory functions</p> <p>6.3 Mechanism of breathing</p> <p>6.3.1 Respiratory volumes and capacities</p> <p>6.4 Exchange of gases</p> <p>6.5 transport of gases</p> <p>6.5.1 Transport of oxygen</p> <p>6.5.2 Transport of Carbon-dioxide</p> <p>6.6 Regulation of Respiration</p> <p>6.7 Problems in oxygen Transport</p> <p>6.9 Effects of Smoking</p>
7. Body fluids and circulation	<p>Introduction</p> <p>7.1 Body Fluids</p> <p>7.1.1 Plasma</p> <p>7.1.2 Formed elements</p> <p>7.1.3 Blood groups</p> <p>7.1.4 Coagulation of blood</p> <p>7.1.5 Composition of lymph and its functions</p> <p>7.4 Human Circulatory System</p> <p>7.4.1 Origin and conduction of heart beat</p> <p>7.4.2 Cardiac cycle</p> <p>7.4.3 Cardiac output</p> <p>7.4.4 Electrocardiogram (ECG)</p> <p>7.6 Regulation of Cardiac activity</p> <p>7.7 Disorders of the circulatory system</p>

8. Excretion	Introduction 8.2 Human Excretory system 8.2.1 Structure of Kidney 8.2.2. Structure of Nephron 8.3 Mechanism of urine formation in human 8.4 Regulation of kidney functions 8.6 Role of other organs in Excretion
9. Locomotion and movement	Introduction 9.1 Types of movement 9.2 Types of muscles 9.3 Skeletal muscles 9.3.1 Structure of a skeletal muscle fiber 9.4 Structure of contractile proteins 9.5 Mechanism of muscle contraction 9.6 Types of Skeletal muscle contraction 9.10 Types of joints
10. Neural control and coordination	Introduction 10.1 Neural System 10.4 Central Nervous System 10.4.1 Brain 10.4.2 Spinal cord 10.5 Reflex action and Reflex arc 10.6 Sensory reception and processing 10.6.1 Photoreceptor – Eye 10.6.2 Phonoreceptor 10.6.3 Olfactory receptors
11. Chemical coordination and Integration	Introduction 11.1 Endocrine glands and Hormones 11.2 Human Endocrine system 11.2.1 Hypothalamus 11.2.2 Pituitary gland or Hypophysis 11.2.3 Pineal gland 11.2.4 Thyroid gland

	<p>11.2.5 Parathyroid gland</p> <p>11.2.6 Thymus gland</p> <p>11.2.7 Adrenal gland</p> <p>11.2.10 Hormones of heart, kidney & gastrointestinal tract</p> <p>11.4 Mechanism of hormone action</p>
12. Trends in Economic Zoology	<p>Introduction</p> <p>12.1 Scope of Zoology</p> <p>12.3 Sericulture</p> <p>12.5 Lac Culture</p> <p>12.7 Aquaculture</p> <p>12.7.1 Fish culture</p> <p>12.7.2 Prawn culture</p> <p>12.7.3 Pearl culture</p> <p>12.8 Animal husbandry and management (Cattle & Poultry)</p>

PRACTICAL

CLASS: 11		SUBJECT: BIO_ZOOLOGY
Sl.No	Topic	
1	Pleurobrachia	
2	Tapeworm	
3	Cockroach	
4	Pila	
5	Squamous epithelium	
6	Columnar epithelium	
7	Rib cage	
8	Ball and Socket joint	
9	Test for Ammonia	
10	Test for Urea	
11	Test for Salivary Amylase	
12	Kangeyam bull	
13	Honey Bee	
14	Bombyx mori	