

ZOOLOGY

Sl. No	Name of the Chapter	Focus Area
1	Chapter 1 The Living world	Table 1.1 (Scientific name of Man and Housefly) 1.4 Taxonomical AIDS
2	Chapter 4 Animal Kingdom	4.1.2 Symmetry 4.1.3 Diploblastic and Triploblastic Organisation 4.1.4 Coelom 4.2.1 Phylum Porifera (ostia, osculum, choanocytes; examples) 4.2.2 Phylum Coelenterata (Cnidoblast; alternation of generations; examples) 4.2.3 Phylum Ctenophora (Comb plates; Bioluminescence; examples) 4.2.4 Phylum Platyhelminthes (Adaptations of parasitic forms; examples) 4.2.5 Phylum Aschelminthes (Difference between male & female worms; Eggs) 4.2.6 Phylum Annelida (Metamerism; Parapodia,nephridia- function; examples) 4.2.7 Phylum Arthropoda (Malpighian tubules ; Eggs for economically important insects & vectors) 4.2.8 Phylum Mollusca (Radula; examples) 4.2.9 Phylum Echinodermata (Water vascular system; examples) 4.2.11 Phylum Chordata (Fundamental characteristics only) Table 4.1-Comparison of Chordates and Non-chordates 4.2.11.2 Class Chondrichthyes (Scales; Eg Scoliodon, Pristis) 4.2.11.3 Class Osteichthyes (Significance of air bladder;Scales Eg Hippocampus, Catla); Difference between chondrichthyes and osteichthyes) 4.2.11.4 Class Amphibia (Respiration; Cloaca; eg : Salamandra , Rana) 4.2.11.5 Class Reptilia (Epidermal scales, skin cast; examples) 4.2.11 .6 Class Aves(Adaptations; examples) 4.2.11.7 Class Mammalia (Characteristics; Examples)
3	Chapter 7 Structural organisation in Animals	7.1.1 Epithelial tissue (three types of Simple Epithelium,their location and function ; Tight junction, Adhering junction and Gap Junction) 7.1.2 Connective tissue (Functions of Areolar; Adipose; tendons; ligaments) 7.1.3 Muscle tissue (figure 7.7 Comparison of skeletal , smooth & cardiac muscle tissue) 7.1.4 Neural tissue (Neuroglial cells-function) 7.4.1 Morphology (mouth parts) 7.4.2 Anatomy(Alimentary canal of cockroach; Nervous system of Cockroach – Ommatidia; Mosaic vision)
4	Chapter 9 Biomolecules	9.2 Primary and secondary metabolites (table 9.3 some secondary metabolites) 9.4 Proteins (Table 9.5 proteins and their functions) 9.7 Structure of proteins (primary, secondary, tertiary and quaternary structure, figure 9.4) 9.8 Nature of Bond linking monomers in a polymer (peptide, glycosidic, phospho diester bond; Structure of DNA) 9.12.4 Factors affecting enzyme activity (Temperature and pH ; concentration of substrate) 9.12.5 Classification and nomenclature of enzymes 9.12.6 Co factors
5	Chapter 16 Digestion and Absorption	16.1.1 Alimentary canal (Thecodont,Diphyodont,Heterodont : dental formula of man; layers in the wall of alimentary canal, figure 16.4) 16.2 Digestion of food -(function of mucus and bicarbonate ions; inactive enzymes in pancreatic juice; functions of Goblet cells; succus entericus 16.4 Disorders of Digestive system

6	Chapter 17 Breathing and Exchange of Gases	17.1.1 Human Respiratory System (Pharynx,Glottis,Epiglottis, Pleura ; Steps in Respiration) 17.2 Mechanism of breathing 17.2.1 Respiratory volumes and Capacities (TV, RV) 17.4.1 Transport of Oxygen 17.6 Disorders
7	Chapter 18 Body Fluids and circulation	18. 1. 3.1 ABO grouping(Table 18.1 blood groups and donor compatibility) 18.1.3.2 RH grouping (Erythroblastosis Foetalis) 18.1.4 Coagulation of blood 18.3.1 Human circulatory system(Pericardium,bicuspid valve, tricuspid valve, semilunar valves, SA node, AV node, bundle of HIS, purkinje fibres 18. 3. 2 Cardiac cycle (systole, diastole, heart sounds) 18.3.3 ECG (figure 18.3; waves in ECG, significance) 18.6 Disorders of circulatory system
8	Chapter 19 Excretory products and their elimination	Ammonotelic, uricotelic, ureotelic 19.1 Human excretory system(structure of nephron) 19.2 Urine formation 19.5 Regulation of kidney function (Function of ADH & ANF ; Renin – Angiotensin mechanism) 19.8 Disorders of the excretory system (Uremia, Glomerulonephritis)
9	Chapter 20 Locomotion and movement	20.2.1 Structure of contractile proteins 20.2.2 Mechanism of muscle contraction (Stages of Cross bridge formation) Refer Fig: 20.4 20.3 Skeletal system (ribs) 20.4 Joints 20.5 Disorders (Arthritis,Osteoporosis,Gout)
10	Chapter 21 Neural control and coordination	21.3 Neuron as structural and functional unit of neural system 21.3.2 Transmission of impulses 21.4.1 Fore Brain (Corpus callosum, hypothalamus and its functions) 21.4.2 Midbrain (Corpora quadrigemina) 21.4.3 Hind brain 21.5 Reflex action and reflex arc 21.6.1.1 Parts of an eye 21.6.2 The Ear - structure
11	Chapter 22 Chemical control and coordination	22.2.1 Hypothalamus(Function of GnRH, Somatostatin) 22.2.2 The Pituitary gland (Functions of GH,TSH,FSH,Oxytocin, Vasopressin; Gigantism, acromegaly, dwarfism, diabetes insipidus) 22.2.3 Pineal gland 22.2.4 Thyroid gland (Functions of Thyroid hormones) 22.2.5 Parathyroid 22.2.7 Adrenal gland (emergency hormones) 22.2.8 Pancreas (Hormones and their function) 22.2.9 Testis(Leydig cells,androgens) 22.2.10 Ovary (Corpus luteum, progesterone, oestrogen) 22.3 Hormones of heart, kidney and gastrointestinal tract (Atrial natriuretic factor, erythropoietin)

Unless specified, the topics under the main heading has to be studied. Specified topics are given inside the brackets

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