

ANIMAL PHYSIOLOGY AND ENDOCRINOLOGY

CONTENTS

<i>Chapter Name</i>	<i>Pages</i>
CHAPTER-1 : PHYSIOLOGICAL OF DIGESTION	9-46
<ul style="list-style-type: none">● Nutrition● Nutritional Types● Food● Feeding Mechanisms● Microphages● Macrophages● Feeding Fluid or Soft Tissues● Digestion● Types of Digestion● Digestive System● Human Digestive System● Facts About Digestive Systems● Physiology of Digestion● Process of Digestion● Interesting Facts	
CHAPTER-2 : PHYSIOLOGY OF RESPIRATION	47-104
<ul style="list-style-type: none">● Necessity of Respiration● Types of Respiration● Principle of Exchange of Gases● Characteristics of the Respiratory Surface● Organs of Respiration● Respiratory System of Man● Artificial Respiration● Pulmonary Air Volumes and Lung Capacities● Respiratory Pigments● Carbon Monoxide Poisoning● Control of Respiration● Rhythmicity and Control of Breathing● Disorders of Respiratory System● Internal Respiration	
CHAPTER-3 : ANIMAL TISSUES	105-140
<ul style="list-style-type: none">● Epithelial Tissues● Types of Epithelial Tissues● Glands● Types of Glands● Muscular Tissues● Connective Tissues● Nervous Tissues	

CHAPTER-4 : CARTILAGES AND BONES	141-153
<ul style="list-style-type: none"> ● Cartilages ● Bones ● Skeletal System 	
Chapter-5 : CARDIVASCULAR SYSTEMS	154-223
<ul style="list-style-type: none"> ● Vascular Tissues ● Types of Vascular Tissues ● Necessety of Blood ● Haemoglobin ● Types of Haemoglobin ● Lifecycle of Erythrocytes ● Haemostasis and Blood Coagulation ● Theories of Blood Coaguation ● Haemopoiesis ● Blood Volume ● Cardio Vascular System ● Physiology of Heart ● Structure of Mammalian Heart ● Cardiac Output and Its Regulation ● Frank - Starling Law of The Heart ● Heart Beat ● Cardiac Cycle ● Blood Pressure and Its Regulation 	
CHAPTER-6 : NERVOUS SYSTEM	224-272
<ul style="list-style-type: none"> ● Basic Functions of Nervous System ● Mode of Control of Nervous System ● General Organization of Nervous System ● Types of Matter ● Peripheral Nervous System (PNS) ● Cranial or Cerebral Nerves ● Reflexes ● Autonomic Nervous System (ANS) ● Sympathetic Nervous System ● Parasympathetic Nervous System ● Conduction of Nerve Impulses ● Receptors or Sense Organs ● Skin Receptors ● Organs of Smell or Olfactory Organs ● Organs of Taste or Gustatory Organs ● Organs of Sight (Eyes) ● Organ of Hearing and Equilibrium 	
CHAPTER-7 : MUSCULAR SYSTEM	273-295
<ul style="list-style-type: none"> ● Histology and Ultra-structure of Muscles ● Chemical Composition of Muscle ● Mechanism of Muscle Contraction ● Molecular and Chemical Basis of Muscle Contraction ● Innervations (Nervous Control) of Muscle ● Excitation and Contraction Coupling 	

Chapter-8 : RENAL PHYSIOLOGY	296-328
<ul style="list-style-type: none"> ● Necessity of Excretion and Osmoregulation ● Excretion ● Ornithine Cycle ● Types of Excretion ● Evolution of the Kidney ● Excretory System of Man ● Structure and Function of Kidney ● Structure of a Nephron ● Renal Blood Supply ● Accessory Excretory Organs ● Physiology Urine Formation ● Urine ● Micturition ● Counter-current Mechanism ● Osmoregulatory Role of Kidneys ● Functions of the Kidneys 	
Chapter-9 : REPRODUCTIVE SYSTEM	329-353
<ul style="list-style-type: none"> ● Human Male Reproductive System ● Human Female Reproductive System ● Reproductive Cycles in Females ● Lactation ● Methods of Contraception in Humans 	
Chapter-10 : INTRODUCTION TO ENDOCRINOLOGY	354-363
<ul style="list-style-type: none"> ● Endocrine Glands ● Hormones 	
Chapter-11 : EPIPHYSIS, HYPOTHALAMO-HYPOPHYSIAL AXIS	364-381
<ul style="list-style-type: none"> ● Epiphysis (Pineal Body) ● Hypothalamus ● Pituitary Gland 	
Chapter-12 : PERIPHERAL ENDOCRINE GLANDS	382-403
<ul style="list-style-type: none"> ● Thyroid ● Parathyroids ● Adrenal Glands ● Thymus Gland ● Hormones of Pancreas 	
Chapter-13 : REGULATION OF HARMONAL ACTION	404-409
<ul style="list-style-type: none"> ● Hormonal Actions at Cellular Level 	
PRACTICALS	410-469
SELECTED READINGS	470