

Govt. College, Safidon (Jind)-126112

Session: 2024-25 (Even Semester)

Lesson Plan

Class: B.Sc. Ind year (Med)
IV semster

Name of the Teacher: Dr. Manjeet Kaur

Subject: Zoology

Sr. No.	Months	Topic
1.	January	Introduction, classification, structure, function and general properties of proteins. Carbohydrates and lipids. Nomenclature, classification and mechanism of enzyme action, Enzyme kinetics factors affecting enzyme activity, Inhibitor of Enzyme. Transport through biomembranes (Active and passive). Osmotic Pressure, hydrogen ion concentration and buffers.
2.	February	Nutrition: Nutritional components; Carbohydrates, fats, lipids, vitamins and minerals; Types of diet and feeding, Digestion of lipids, proteins, carbohydrates and nucleic acid, Symbiotic digestion. Lactose Intolerance. Physico-chemical mechanism of Digestion. Absorption of nutrients and assimilation. Control of secretion of digestive juices. Muscle: Types of muscles, ultra structure of skeletal muscle.
3.	March	Neuromuscular junction, Bio-chemical and physical events during muscle contraction, Single muscle twitch, tetanus, muscle fatigue, muscle tone, oxygen debt, Cox cycle. Swallowing process. Circulation: Origin, condition and regulation and functions of heart beat. Cardiac cycle, Electrocardiogram, Cardiac output, fluid pressure and flow pressure in closed and open circulatory system. Composition and function of blood & lymph, Mechanism of Coagulation of blood, Coagulation factors, anticoagulants, haemopoiesis. Weekly Test.
4.	April	Respiration: Exchange of respiratory gases transport of gases, lung volume, oxygen dissociation curve of haemoglobin, Bohr's effect, Haldane's effect, phenomenon (chloride shift), control of oxygen. Myoglobin, Weekly Test. Excretion: Pattern of excretory product viz. Amonotelles, Ureotelic, Uricotelic, osmotic cycle (Krebs-Henseleit cycle) for Urea formation in liver, Urine formation, composition of Urine, counter-current mechanism of urine formation. Osmoregulation, micturition.
5.	May	Neural Integration: Nature, origin and propagation of nerve impulse along with myelinated & non-myelinated nerve fibre, conduction of nerve impulse across synapse, synaptic delay and synaptic fatigue, Neurotransmitter, Chemical integration of Endocrine. - Chronology: Structure, chemical nature and mechanism of peptide and steroid hormone action. Revision and weekly Test. Physiology of hypothalamus, pituitary, thyroid, Parathyroid, adrenal, Pancreas and gonads. Hormonal disorder, Reproduction: Spermatogenesis, Capacitation of spermatozoa, Oogenesis, ovulation, Formation of corpus luteum, Oestrus - oestrous cycle, Menstrual cycle in human, Fertilization, implantation and gestation, parturition.
		Revision & Exams

Signature

Dr. Manjeet Kaur
Department of Zoology

Govt. College, Safidon (Jind)-126112

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		Revision & Exams

Signature

Dr. Manjeet Kaur
Department of Zoology

Govt. College, Safidon (Jind)-126112

Session: 2024-25 (2nd Semester)

Lesson Plan

Class: B.Sc Ist (IInd Sem)

Name of the Teacher: DR. ANIL SHARMA

Subject: Zoology

Sr. No.	Months	Topic
	JANUARY.	CHORDATES:- Salient features of Chordates.
		PROTCHORDATES:- UROCHORDATA: Systemic Position, distribution, ecology, morphology and affinities.
	FEBRUARY.	PISCES. General characters and classification upto class level with examples. <u>Salam. as fish.</u>
		Type study of <u>Labeo</u> .
		AMPHIBIANS:- General characters and classification upto class level.
	MARCH	Type study of <u>Rana Tigrina</u>
		Parental Care and Mating in Amphibians
		<u>Reptilia</u> . General characters and classification upto class level
	APRIL	AVES:- General characters and classification upto class level.
		Flight Adaptation in birds, Archaeopteryx as missing link.
	MAY.	MAMMALS:- General characters and classification upto class level
		Revision of the Syllabus.
	PRACTICAL:- JAN	STUDY of Sp. Protochordates, Urochordates and Cyclostomes
	FEB	STUDY of Sp. Chondrichthyan. Osteichthyan.
	MARCH	STUDY of 1p. Amphibian.
	APRIL	STUDY of 1p. Reptilia Aves.
	MAY.	STUDY of 1p. Mammalia

Dept. of Zoology
DR ANIL SHARMA
Signature 17/11/25