SESSION: 2023-24

Name of the Teacher: Dr. Komal Department: Zoology

Subject/Course: Paper I Life and Diversity of Chordates-II Programme: B.Sc. IInd Year (Med+Biotech)

Semester: IV

Unit	Name of Topic/Contents	Tentative
1.	Amphibia: Origin, Evolutionary tree. Type study of frog (Ranatigrina), Parental Care in Amphibia	Pates/Days February
2.	Reptilia: Type study of Lizard (Hemidactylus), Origin, Evolutionary tree. Extinct reptiles; Poisonous and non-poisonous snakes; Poison apparatus in snakes.	March
3.	Aves: Type study of Pigeon (Columba livia); Flight adaptation, Principles of aerodynamics in Bird flight, migration in birds. migration in birds.	April
4.	mammels: character and classification Type study of Rat Adaptive radiation and dentition in mammals	May

Name of the Teacher: Dr. Komal Department: Zoology

Subject/Course: paper 2 Mammalian physiology II Programme: B.Sc. IInd Year (Med+Biotech)

Semester: IV

Unit	Name of Topic/Contents	Tentative Dates/Days
1.	Circulation: Origin, conduction and regulation of heart beat, cardiac cycle, electrocardiogram, cardiac output, fluid pressure and flow pressure in closed and open circulatory system; Composition and functions of blood & lymph; Mechanism of coagulation of blood, coagulation factors; anticoagulants, haempoiesis.	February
2.	Respiration: Exchange of respiratory gases, transport of gases, lung air volumes, oxygen dissociation curve of hemoglobin, Bohr's effect, Haburger's phenomenon (Chloride shift), control/regulation of respiration.	March
3.	Excretion: Patterns of excretory products viz. Amonotelic, ureotlic uricotelic, ornithine cycle (Kreb's – Henseleit cycle) for urea formation in liver. Urine formation, counter-current mechanism of urine concentration, osmoregulation, micturition. Neural Integration: Nature, origin and propagation of nerve impulse alongwithmeddullated& non-medullated nerve fibre, conduction of nerve impulse across synapse.	April
4.	Chemical integration of Endocrinology: Structure and mechanism of hormone action; physiology of hypothalamus, pituitary, thyroid, parathyroid, adrenal, pancreas and gonads. Reproduction: Spermatogenesis, Capacitation of spermatozoa, ovulation, formation of corpus luteum, oestrous-anoestrous cycle, Menstrual cycle in human; fertilization, implantation and gestation.	May

Name of the Teacher: Ms.Nitu Department: Zoology

 $Subject/Course:\ paper\ 1.\ Aquaculture\ \&Pest\ Management\ I\ \ Programme:\ B.Sc.\ 3^{rd}\ Year\ (Med+Biotech)$ 

Semester: v

Unit	Name of Topic/Contents	Tentative Dates/Days
1.	Introduction to world fisheries: Production, utilization and demand., Fresh Water fishes of India:River system, reservoir, pond, tank fisheries; captive and culture fisheries, cold water fisheries	February
2.	Fishing crafts and gears, Details of different type of nets,, Fin fishes, Crustaceans, Molluscs and their culture.	March
3.	Study of important insect pests of crops and vegetables:,Sugercane leaf-hopper (Pyrillaperpusilla) (b) Sugercane Whitefly (Aleurolobusbarodensis),Sugercane top borer (Sciropophaganivella) (d) Sugercane root borer (Emmaloceradepresella),Gurdaspur borer (Bissetiasteniellus)	April
4.	With their systematic position, habits and nature of damage cause. Life cycle and control of Pyrillaperpusillaonly., Pink bollworm (Pestinophoragossypfolla) (b) Red cotton bug (DysdercusCingulatus), Cotton grey weevil (Myllocerusundecimpustulatus) (d) =Cotton Jassid (Amrascadevastans), Wheat stem borer (Sesamiainferens) with its systematics position, habits, nature of damage caused. Life cycle and control., (a) Gundhi bug (Leptocorisaacuta) (b) Rice grasshopper (Hieroglyphusbanian) (c) Rice stem borer (Scirpophagaincertullus) (d) Rice Hispa (Diceladispaarmigera), Their systematics position, habits and nature of damage caused. Life cycle and control of Aulacophorafaveicollis.	May

Name of the Teacher: Ms.Nitu Department: Zoology

Subject/Course: paper 2.. Aquaculture &Pest Management II Programme: B.Sc. 3<sup>rd</sup> Year

(Med+Biotech)

Semester: v

Unit	Name of Topic/Contents	Tentative Dates/Days
1.	Seed production: Natural seed resources – its assessment, collection, Hatchery production 2. Nutrition: Sources of food (Natural, Artificial) and feed composition (Calorie and Chemical ingredients	February Pages 1
2.	Field Culture: Ponds-running water, recycled water, cage, culture; poly culture. 4. Culture technology: Biotechnology, gene manipulation and cryopreservation of gametes	March
3.	Their systematic position, habits and nature of damage caused. Life cycle and control of Trogodermagranarium. 6. Insect control: Biological control, feasibility of biological agents for control. 7. Chemical control: History, Categories of pesticides	April
4.	Important pesticides from each category to pests against which they can be used.  Insect repellants and attractants.,	May

SESSION: 2023-24

Name of the Teacher: Ms.Anjali Sharma Department: Zoology

Subject/Course: Life science/Animal diversity of chordates

Programme: B.sc Ist year

Unit	NameofTopic/Contents	TentativeDates/Days
1.	salient features, classification of chordates and protochordates characters. Type study of Herdmania	Feburary
2.	General character and classification of class pisces, fins, Type study of labeo. General character and classification of class amphibians and reptiles	March
3.	Type study of frog, General character and classification of class aves, General character and classification of mammalia.	April
4.	Type study of Rat	May

SESSION: 2023-24

Name of the Teacher: Ms.Anjali Sharma Department: Zoology

Subject/Course: SEC / Technique in Bird watching Programme:

B.A + B.sc

Unit	NameofTopic/Contents	TentativeDates/Days
<i>1</i> .	introduction to bird watching, characteristics of birds with flight adaptation, important field sign of bird watching	March
2.	zoological name and field characters of birds, sexual dimorphism in birds	March
3.	Important bird area of India and haryana, resident and migratory birds	April
4.	Birds as a bioindicator, birds in food chain,Bird migration	May

SESSION: 2023-24

Name of the Teacher: Ms.Chanchal Sharma Department: Zoology

Subject/Course: Life science/Animal diversity of chordates

Programme: B.sc Ist year

Unit	NameofTopic/Contents	TentativeDates/Days
1.	salient features, classification of chordates and protochordates characters. Type study of Herdmania	Feburary
2.	General character and classification of class pisces, fins, Type study of labeo. General character and classification of class amphibians and reptiles	March
3.	Type study of frog, General character and classification of class aves, General character and classification of mammalia.	April
4.	Type study of rat	May

SESSION: 2023-24

Name of the Teacher: Ms. Chanchal Sharma Department: zoology

Subject/Course: MDC/Basic of zoology II Programme: B.A+B.sc

Unit	NameofTopic/Contents	Tentative Dates/Days
1.	Introduction of chordates, General character of chordates and protochordates	Feburary
2.	General character and classification of class pisces, Economic importance of fishes, General character and classification of class amphibia, Economic importance	March
3	general character and classificationof class reptiles and economic importance of class reptiles	April
4.	General character and classification of class aves and economic importance of class aves, general character and classification of class mammalia and economic importance of class mammalia	May