

Government College Sanjauli

TEACHING PLAN BSC IIIrd YEAR ZOOLOGY

Discipline Specific Elective DSE IA APPLIED ZOOLOGY 301 (A) THEORY

MONTHS	WEEK	BOOK/UNIT/TOPIC	TEACHING METHOD	STUDENT ACTIVITIES
JULY	First and Second week	Unit 1: Introduction to Host-parasite Relationship Host, Definitive host, Intermediate host, Parasitism, Symbiosis, Commensalism, Reservoir, Zoonosis	Lecture system Power point presentation	Assignments prepared by students
	Third , Fourth and Fifth week	Unit 2: Epidemiology of Diseases Transmission, Prevention and control of diseases: Tuberculosis, typhoid		
AUGUST	First and Second week	Unit 3: Rickettsiae and Spirochaetes Brief account of <i>Rickettsia prowazekii</i> ,	Lecture system Power point presentation	Power presentation Given by students Class tests
	Third and fourth week	<i>Borrelia recurrentis</i> and <i>Treponema pallidum</i>		
SEPTEMBER	First week	Unit 4: Parasitic Protozoa Life history and pathogenicity of <i>Entamoeba histolytica</i> ,	Lecture system Power point presentation, slides and Charts were also shown to students	Diagrammatic presentation given by students
	Second and third week	<i>Plasmodium vivax</i>		
	Fourth and fifth week	<i>Trypanosoma gambiense</i>		
OCTOBER	First , second ,third and fourth week	Unit 5: Parasitic Helminthes Life history and pathogenicity of <i>Ancylostoma duodenale</i> and <i>Wuchereria bancrofti</i>	Lecture system, Charts were also shown to students Power point presentation	Class tests Power presentation Given by students
NOVEMBER	First , second ,third and fourth week	Unit 6: Insects of Economic Importance Biology, Control and damage caused by <i>Helicoverpa armigera</i> , <i>Pyrilla perpusilla</i> and <i>Papilio demoleus</i> , <i>Callosobruchus chinensis</i> , <i>Sitophilus oryzae</i> and	Lecture system Power point presentation	Oral test and quizzes given by students

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		<i>Tribolium castaneum</i>		
DECEMBER	First , second ,third week Fourth and fifth week	Unit 7: Insects of Medical Importance Medical importance and control of <i>Pediculus humanus corporis</i> , <i>Anopheles</i> , <i>Culex</i> , <i>Aedes</i> , <i>Xenopsylla cheopis</i> Unit 8: Animal Husbandry Preservation and artificial insemination in cattle; Induction of early puberty and synchronization of estrus in cattle	Lecture system Permanents slides of specimen were shown in the practical Power point presentation	Projects and Assignments prepared by students
FEBRUARY	Second and third week Fourth week	Unit 9: Poultry Farming Principles of poultry breeding, Management of breeding stock and broilers, Processing and preservation of eggs Unit 10: Fish Technology Genetic improvements in aquaculture industry; Induced breeding and transportation of fish seed	Lecture system Power point presentation	Projects and Assignments prepared by students

Remedial Classes of weak students were also taken in the months

IMMUNOLOGY ZOOL 302(B) TH THEORY DSE IB (TEACHING PLAN)

MONTH	WEEK	BOOK/UNIT/TOPIC	TEACHING METHOD	STUDENT ACTIVITIES
JULY	Classes were taken last three days each week	Unit 1: Overview of the Immune System Introduction to components of basic concepts in immune system, immunology, innate and principles of adaptive immune system	Lecture system Power point presentation	Class tests
AUGUST	Classes were taken last three days each week	Unit 2: Cells and Organs of the Immune System Haematopoiesis, Cells of immune lymphoid organs) of the immune system system and organs (primary and secondary	Lecture system Power point presentation	Group discussion
SEPTEMBER	Classes were taken last three days each week	Unit 3: Antigens Basic properties of antigens, B and T cell epitopes, haptens and adjuvants	Lecture system Power point	Power presentation Given by students

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			presentation		
OCTOBER	Classes were taken last three days each week	Unit 4: Antibodies Structure, classes and function of antibodies, interactions as tools for research and diagnosis	monoclonal antibodies, antigen antibody	Lecture system Power point presentation	Power points presentation given by students
NOVEMBER	Classes were taken last three days each week	Unit 5: Working of the immune system Structure and functions of MHC, exogenous presentation and processing, Basic properties system: Components and pathways.	and endogenous pathways of antigen and functions of cytokines, Complement	Lecture system Power point presentation	Class tests Power points presentation given by students
DECEMBER	Classes were taken last three days each week	Unit 6: Immune system in health and Gell and Coombs' classification and brief hypersensitivities, Introduction to concepts of Disease description of various types of autoimmunity and immunodeficiency,		Lecture system Power point presentation	Assignments preparation
FEBRUARY	Classes were taken last three days each week	Unit 7: Vaccines General introduction to vaccines, Various	types of vaccines	Lecture system Power point presentation	Projects

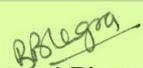
Remedial Classes of weak students were also taken in the months

SKILL ENHANCEMENT COURSES (Teaching Plan) SEC - III

SERICULTURE Code: ZOOL 303 TH

MONTH	WEEK	BOOK/UNIT/TOPIC	TEACHING METHOD	STUDENT ACTIVITIES
JULY	Classes were taken 3 days per week	Unit 1: Introduction Sericulture: Definition, history and present status; Silk route Types of silkworms, Distribution and Races Exotic and indigenous races Mulberry and non-	Lecture system Power point presentation	Oral tests

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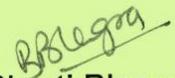
		mulberry Sericulture		
AUGUST	Classes were taken 3 days per week	Unit 2: Biology of Silkworm Life cycle of <i>Bombyx mori</i> Structure of silk gland and secretion of silk	Lecture system Power point presentation Through models and charts	Class tests
SEPTEMBER	Classes were taken 3 days per week	Unit 3: Rearing of Silkworms Selection of mulberry variety and establishment of mulberry garden Rearing house and rearing appliances	Lecture system Power point presentation	Class tests
OCTOBER	Classes were taken 3 days per week	Unit 3: Rearing of Silkworms CONTD. Disinfectants: Formalin, bleaching powder, RKO Silkworm rearing technology: Early age and Late age rearing Types of mountages Spinning, harvesting and storage of cocoons	Lecture system Power point presentation	Group discussions
NOVEMBER	Classes were taken 3 days per week	Unit 4: Pests and Diseases Pests of silkworm: Uzi fly, dermestid beetles and vertebrates	Lecture system Power point presentation	Test
DECEMBER	Classes were taken 3 days per week	Unit 4: Pests and Diseases CONTD. Pathogenesis of silkworm diseases: Protozoan, viral, fungal and bacterial Control and prevention of pests and diseases	Lecture system Power point presentation	Assignments preparation
FEBRUARY	Classes were taken 3 days per week	Unit 5: Entrepreneurship in Sericulture Prospectus of Sericulture in India: Sericulture industry in different states, employment, potential in mulberry and non-mulberry sericulture. Visit to various sericulture centres.	Lecture system Group discussion	Projects preparation by students  (Prof. Bharti Bhagra) Principal, Centre of Excellence, GDC Sanjauli, Shimla (HP)

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SEC – IV AQUARIUM FISH KEEPING Code: ZOOL 304 (A) TH (TEACHING PLAN)

MONTH	WEEK	BOOK/UNIT/TOPIC	TEACHING METHOD	STUDENT ACTIVITIES
JULY	Classes were taken 3 days per week	Unit1: Introduction to Aquarium Fish Keeping The potential scope of Aquarium Fish Industry as a Cottage Industry,	Lecture system PowerPoint presentation	Group Discussion
AUGUST	Classes were taken 3 days per week	Unit1: Introduction to Aquarium Fish Keeping CONTD. Exotic and Endemic species of Aquarium Fishes	Lecture system PowerPoint presentation	Class Test
SEPTEMBER	Classes were taken 3 days per week	Unit 2: Biology of Aquarium Fishes Common characters and sexual dimorphism of Fresh water and Marine Aquarium fishes such as Guppy, Molly, Sword tail, Gold fish, Angel fish, Blue morph, Anemone fish and Butterfly fish	Lecture system PowerPoint presentation	Assignments preparation
OCTOBER	Classes were taken 3 days per week	Unit 3: Food and feeding of Aquarium fishes Use of live fish feed organisms. Preparation and composition of formulated fish feeds	Lecture system PowerPoint presentation	Class Test
NOVEMBER	Classes were taken 3 days per week	Unit 4: Fish Transportation Live fish transport - Fish handling, packing and forwarding techniques	Lecture system PowerPoint presentation	Class Test Discussion
DECEMBER	Classes were taken 3 days per week	Unit 5: Maintenance of Aquarium General Aquarium maintenance – budget for setting up an Aquarium	Lecture system PowerPoint presentation	Projects preparation by students
FEBRUARY	Classes were taken 3 days per week	Fish Farm as a Cottage Industry	Lecture system PowerPoint presentation	Group Discussion

Dr. Shweta Sharma


(Prof. Bharti Bhagra)
 Principal,
 Centre of Excellence,
 GDC Sanjauli, Shimla (HP)