

# Teaching Plan

Academic Year: 2017-18

**Name of Department: ZOOLOGY**

**Name of Teacher: D.P. KORI**

**Class: B.SC. PART- I**

**Subject: ZOOLOGY Paper I**

**Course Type: Theory**

**Course Code / Title: Cell Biology and Non-chordata**

Month/Week	Unit/ Title	Topic of Lecture	No. of lectures	Methods/Mode of Delivery
SEPTEMBER	Unit I	1. The cell (Prokaryotic and Eukaryotic) 2. Organization of Cell: Extra-nuclear and nuclear. Plasma membrane, Mitochondria, Endoplasmic reticulum, Golgi body, Ribosome and Lysosome). 3. Nucleus, Chromosomes, DNA and RNA	10	1. Chalk and talk method 2. Group discussion 3. Problem Solving
OCTOBER	Unit II	1. Cell division (Mitosis and Meiosis). 2. An elementary idea of Cancer cells And Cell transformation. 3. An elementary idea of Immunity: Innate & Acquired Immunity. Lymphoid organs, Cells of Immune System, Antigen, antibody and their interactions	13	1 . Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving
NOVEMBER	Unit III	General characters and classification of Phylum Protozoa, Porifera, and Coelenterata up to order. 1. Protozoa: Type study - Paramecium. 2. Porifera: Type study - Sycon.	10	1 . Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving
DECEMBER	Unit III & IV	3. Coelenterata: Type study - Obelia. 1. General characters and classification of Phylum Platyhelminthes, Nemathelminthes, Annelida and Arthropoda up to order. 2. Arthropoda: Type Study - Palaemon.	12	1 . Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving

TEACHING PLAN  
 ACADEMIC YEAR-2017-18  
 COURSE TYPE- THEORY  
 NAME OF DEPARTMENT-ZOOLOGY

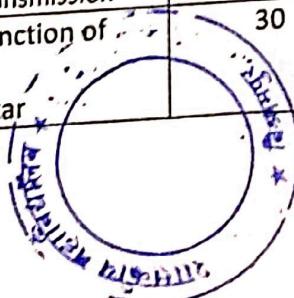
CLASS-B.SC-2ND

**PAPER I / II**

NAME OF TEACHER -D.P.KORI

COURSE CODE/TITLE-ANATOMY AND PHYSIOLOGY DB  
 VERTIBRATE ENDOCRINOLOGY, REPRODUCTIVE BIOLOGY BEHAVIOUR EVOLUTION AND  
 APPLIED ZOOLOGY

MOUNTH/WE EK	UNIT TITTLE	TOPIC OF LECTURE	NO.OF LECT.	METHODS
SEPTEMBER	UNIT- 1 <sup>ST</sup>	1.Integument and its derivatives: structure of scales,hair and feather 2.alimentaey canal and digestive glands in vertebrates 3.respiratory organs:gills and lung,air-sac in birds	10	1.Chaked talic method 2.grop Disseelury 3.Prolem solving
OCTOBER	UNIT- 2 <sup>ND</sup>	1.Endoskeleton :(a)Axial Skeleton —skull and vertebrae (b)Appendicular Skeleton Limbs and girdles	20	1.Chaked talic method 2.grop Disseelury 3.Prolem solving
	UNIT- 3 <sup>RD</sup>	2.Circulatory Syestam:Evolution of heart and aortic arches 3.Urinogenital Syestam :Kinney and excretory ducts		
NOVEMBER	UNIT- 4 <sup>TH</sup>	1.Digestion and absorption of ditetary compnnts 2.physiolgy of heart,cardiac cycle and ECG 3.blood coagulation 4.Resiration :mechanism and control of breathings	30	1.Chaked talic method 2.grop Disseelury 3.Prolem solving
DECEMBER	UNIT- 5 <sup>TH</sup>	1.Excretion:Physiology of excretion,osmoregulation 2.Physiology of muscle contraction 3.Physiology of nerve impulse,Synaptic transmission	20	1.Chaked talic method 2.grop Disseelury 3.Prolem solving
JANUARY	UNIT- 6 <sup>TH</sup> Unit 1	1.Structure and function of Endocrine galads 2.Hormone recipetar	30	1.Chaked talic method 2.grop



		3. Biosynthesis and secretion of thyroid, adrenal, ovarian and testicular hormones 4. Endocrine disorder of pituitary, thyroid, adrenal and pancreas		Disseelury 3. Problem solving
	Unit 2	1. Reproductive cycle in vertebrates 2. Menstruation, lactation and pregnancy 3. Mechanism of parturition 4. Hormone regulation of gametogenesis		
FEBRUARY	UNIT- 7 <sup>TH</sup> UNIT 3.	1. Evidences of organic evolution. 2. Theories of organic evolution. 3. Variation, Mutation, Isolation and natural selection. 4. Evolution of Horse	25	1. Chaked talk method 2. grop Disseelury 3. Problem solving
	Unit 4.	1. introduction to Ethology: Branches and concept of ethology. 2. Patterns of Behaviour, Taxes, Reflexes, Drives and stereotyped behavior. 3. Reproductive behavioural patterns. 4. drugs and behavior, Hormone and behavior		
	Unit 5.	1. Prawn culture 2. Sericulture 3. Apiculture 4. Pisciculture 5. Poultry keeping 6. Elements of pest control: chemical and Biological control		

D. P. Kori  
NAME OF TEACHER

J. D. Mehta  
NAME OF HOD

Principal  
Govt. College Bishrampur  
Distt. Surajpur (C.G.)

**TEACHING PLAN**  
**ACADEMIC YEAR-2018-19**  
**COURSE TYPE- THEORY**  
**NAME OF DEPARTMENT-ZOOLOGY**  
**PAPER I / II**

CLASS-B.SC-2ND

NAME OF TEACHER -D.P.KORI

COURSE CODE/TITLE-ANATOMY AND PHYSIOLOGYDB

VERTIBATE ENDOCRINOLOGY, REPRODUCTIVE BIOLOGY BEHAVIOUR EVOLUTION AND  
 APPLIED ZOOLOGY

MOUNTH/WE EK	UNIT TITTLE	TOPIC OF LECTURE	NO.OF LECT.	METHODS
SEPTEMBER	UNIT- 1ST	1.Integument and its derivatives: structure of scales,hair and feather 2.alimentaey canal and digestive glands in vertebrates 3.respiratory organs:gills and lung,air-sac in birds	10	1.Chaked talic method 2.grop Disseelury 3.Prolem solving
OCTOBER	UNIT- 2 <sup>ND</sup>  UNIT- 3 <sup>RD</sup>	1.Endoskeleton :(a)Axial Skeleton -skull and vertebrae ,(b)Appendicular Skeleton Limbs and girdles 2.Circulatory Syestam:Evolution of heart and aortic arches 3.Urinogenital Syestam :Kinney and excretory ducts	20	1.Chaked talic method 2.grop Disseelury 3.Prolem solving
NOVEMBER	UNIT- 4 <sup>TH</sup>	1.Digestion and absorption of dietary compnents 2.physiology of heart,cardiac cycle and ECG 3.blood coagulation 4.Resiration mechanism and control of breathings	30	1.Chaked talic method 2.grop Disseelury 3.Prolem solving
DECEMBER	UNIT- 5 <sup>TH</sup>	1.Excretion:Physiology of excretion,osmoregulation 2.Physiology of muscle contraction 3.Physiology of nerve impulse,Synaptic transmission	20	1.Chaked talic method 2.grop Disseelury 3.Prolem solving

JANUARY	UNIT- 6 <sup>TH</sup> Unit 1	1. Structure and function of Endocrine glands 2. Hormone receptor 3. Biosynthesis and secretion of thyroid, adrenal, ovarian and testicular hormones 4. Endocrine disorder of pituitary, thyroid, adrenal and pancreas	30	1. Chalked talk method 2. group Dissemination 3. Problem solving
	Unit 2	1. Reproductive cycle in vertebrates 2. Menstruation, lactation and pregnancy 3. Mechanism of parturition 4. Hormone regulation of gametogenesis		
FEBRUARY	UNIT- 7 <sup>TH</sup> UNIT 3.  Unit 4.  Unit 5.	1. Evidences of organic evolution. 2. Theories of organic evolution. 3. Variation, Mutation, Isolation and natural selection. 4. Evolution of Horse 1. Introduction to Ethology: Branches and concept of ethology. 2. Patterns of Behaviour, Taxes, Reflexes, Drives and stereotyped behavior. 3. Reproductive behavioural patterns. 4. Drugs and behavior, Hormone and behavior 1. Prawn culture 2. Sericulture 3. Apiculture 4. Pisciculture 5. Poultry keeping 6. Elements of pest control: chemical and Biological control	25	1. Chalked talk method 2. group Dissemination 3. Problem solving

D.P. Kori  
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D. Kumar  
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4/2022  
PRINCIPAL  
Govt. College Bishrampur  
Distt. Surajpur (C.G.)

## TEACHING PLAN

ACADEMIC YEAR-2020-21

COURSE TYPE- THEORY

NAME OF DEPARTMENT-ZOOLOGY

PAPER I / II

CLASS-B.SC-2ND

NAME OF TEACHER -D.P.KORI

COURSE CODE/TITLE-ANATOMY AND PHYSIOLOGYDB

VERTIBATE ENDOCRINOLOGY, REPRODUCTIVE BIOLOGY BEHAVIOUR EVOLUTION AND  
APPLIED ZOOLOGY

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	Unit 5.	1. Prawn culture 2. Sericulture 3. Apiculture 4. Pisciculture 5. Poultry keeping 6. Elements of pest control: chemical and Biological control		

J. D. Kori  
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Pradeep  
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Distt.-Surajpur(C.G.)

## TEACHING PLAN

ACADEMIC YEAR-2019-20

COURSE TYPE- THEORY

NAME OF DEPARTMENT-ZOOLOGY

**PAPER I / II**

CLASS-B.SC-2ND

NAME OF TEACHER -D.P.KORI

COURSE CODE/TITLE-ANATOMY AND PHYSIOLOGYDB

VERTIBATE ENDOCRINOLOGY, REPRODUCTIVE BIOLOGY BEHAVIOUR EVOLUTION AND

APPLIED ZOOLOGY

MOUNTH/WE EK	UNIT TITTLE	TOPIC OF LECTURE	NO.OF LECT.	METHODS
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D. P. Kori  
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J. M. M.  
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Govt. College Bishrampur  
Distt.-Surajpur(C.G.)

## **TEACHING PLAN**

ACADEMIC YEAR-2019-20

## **COURSE TYPE- THEORY**

**NAME OF DEPARTMENT-ZOOLOGY**

CLASS-B,SC-2ND

PAPER I / II

**NAME OF TEACHER –D.P.KORI**

## **COURSE CODE/TITLE-ANATOMY AND PHYSIOLOGYDB**

VERTEBRATE ENDOCRINOLOGY, REPRODUCTIVE BIOLOGY BEHAVIOUR EVOLUTION AND

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FEBRUARY	UNIT- 7 <sup>TH</sup> UNIT 3.	1.Evidences of organic evolution. 2.Theories of organic evolution. 3.Variation,Mutation and Isolation and natural selection. 4.Evolution of Horse	25	1.Chaked talic method 2.grop Disseelury 3.Prolem solving
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	Unit 5.	1.Prawn culture 2.Sericulture 3.Apiculture 4.Pisciculture 5.Poultry keeping 6.Elements of pest control:chemical and Biological control		

D. P. Kori  
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NAME OF HOD

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**TEACHING PLAN**  
**ACADEMIC YEAR-2021-22**  
**COURSE TYPE- THEORY**  
**NAME OF DEPARTMENT-ZOOLOGY**  
**PAPER I / II** CLASS-B.SC-3rd

NAME OF TEACHER -D.P.KORI

COURSE CODE/TITLE-ECOLOGY, ENVIRONMENTAL BIOLOGY: TOXICOLOGY

MICROBIOLOGY AND MEDICAL ZOOLOGY / GENETIC, CELL PHYSIOLOGY,

BIOTECHNOLOGY AND BIOTECHNIQUES

MOUNTH/WE EK	UNIT TITTLE	TOPIC OF LECTURE	NO.OF LECT.	METHODS
SEPTEMBER	UNIT-1 <sup>st</sup>	1.Aims and scopes of ecology 2. major ecosystems of the world-Brief Introduction 3. population characteristics and regulation of densities 4. communities and ecosystem 5.Bio – geo chemical cycles 6. Air & water pollution 7. Ecological succession	10	1.Chaked talk method 2.grop Disseelury 3.Prolem solving
OCTOBER	UNIT- 2 <sup>nd</sup>	1.Laws of limiting factor 2. Food chain and fresh water ecosystem 3. Energy flow in ecosystem – trophic levels 4. conservation of natural resources 5. environmental Impact assessment	30	1.Chaked talk method 2.grop Disseelury 3.Prolem solving
	UNIT- 3 <sup>rd</sup>	1.Definition and classification of toxicants 2.Basic concept of toxicology 3.principle of systematic toxicology 4.heavy metal toxicity(Arsenic, mercury, lead cadmium) 5.animal poisons- snake venom, scorpion& bee poisoning		

NOVEMBER	UNIT- 4 <sup>th</sup>	1.General and applied, microbiology 2.microbiology of domestic water and sewage 3.Microbiology of milk &milk products 4.Industrial microbiology: fermentation process, production of penicillin, alcoholic beverages, bioleaching.	30	1.Chaked talic method 2.grop Disseelury 3.Prolem solving
	UNIT- 5 <sup>th</sup>	1.Brief introduction to pathogenic microorganism Ricketssia, Soirochaetes, AIDS and Typhoid 2.Brief account of life history &pathogenicity of the following pathogens with reference to man: prophylaxis & treatment 3.Pathogenic protozoa's- Entamoeba trypanosome &plasmodium 4.Pathogenic helminthes- Shistosoma 5.Nematode pathogenic parasites of man 6.Vector insects		
DECEMBER	UNIT- 6 <sup>th</sup>	1.Linkege &linkage maps, sex determination and sex linkage 2.Gene interaction -Incomplete dominance & codominance supplementary gene, complementary gene,Epistasis Lethal gene, Pleiotropic gene and multiple alleles. 3.Mutation :Gene and chromosomal mutation 4.Human genetics: chromosomal alteration : Down Edward ,Patau, Turner and klinefelter syndrome single gene disorders: Alkaptonuria , Phenylketonuria, sickle cell anemia,albinism and colour blindness	20	1.Chaked talic method 2.grop Disseelury 3.Prolem solving
JANUARY	UNIT- 7 <sup>th</sup>	1.General idas about pH& buffer 2.tranceport across membrane:Diffusion and osmosis 3.Active transport in mitochondria & endoplasmic	30	1.Chaked talic method 2.grop Disseelury 3.Prolem solving

D.P.Kori  
Name of teacher

D.Kori

~~S.P.S~~  
Principal  
Govt.College Bishraimpur  
Distt.-Surajpur(C.G.)

**TEACHING PLAN**  
**ACADEMIC YEAR-2017-18**  
**COURSE TYPE- THEORY**  
**NAME OF DEPARTMENT-ZOOLOGY**

CLASS-B.SC-3rd

**PAPER I / II**

NAME OF TEACHER -D.P.KORI

COURSE CODE/TITLE-ECOLOGY, ENVIRONMENTAL BIOLOGY; TOXICOLOGY

MICROBIOLOGY AND MEDICAL ZOOLOGY / GENETIC, CELL PHYSIOLOGY,  
BIOTECHNOLOGY AND BIOTECHNIQUES

MOUNTH/WE EK	UNIT TITTLE	TOPIC OF LECTURE	NO.OF LECT.	METHODS
SEPTEMBER	UNIT-1 <sup>st</sup>	1.Aims and scopes of ecology 2. major ecosystems of the world-Brief Introduction 3. population characteristics and regulation of densities 4. communities and ecosystem 5.Bio – geo chemical cycles 6. Air & water pollution 7. Ecological succession	10	1.Chaked talk method 2.grop Disseelury 3.Prolem solving
OCTOBER	UNIT- 2 <sup>nd</sup>	1.Laws of limiting factor 2. Food chain and fresh water ecosystem 3. Energy flow in ecosystem – trophic levels 4. conservation of natural resources 5.environmental impact assessment	30	1.Chaked talk method 2.grop Disseelury 3.Prolem solving
	UNIT- 3 <sup>rd</sup>	1.Definition and classification of toxicants 2.Basic concept of toxicology 3.principle of systematic toxicology 4.heavy metal toxicity(Arsenic, mercury, lead cadmium) 5.animal poisons- snake venom, scorpion& bee poisoning		

NOVEMBER	UNIT- 4 <sup>th</sup>	1.General and applied, microbiology 2.microbiology of domestic water and sewage 3.Microbiology of milk &milk products 4.Industrial microbiology: fermentation process, production of penicillin, alcoholic beverages, bioleaching.	30	1.Chaked talc method 2.grop Disseelury 3.Prolem solving
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DECEMBER	UNIT- 6 <sup>th</sup>	1.Linkage &linkage maps, sex determination and sex linkage 2.Gene interaction -Incomplete dominance & codominance supplementary gene, complementary gene; Epistasis Lethal gene, Pleiotropic gene and multiple alleles. 3.Mutation :Gene and chromosomal mutation 4.Human genetics: chromosomal alteration: Down-Edward', Patau, Turner and klinefelter syndrome single gene disorders: Alkaptonuria , Phenylketonuria, sickle cell anemia,albinism and colour blindness	20	1.Chaked talc method 2.grop Disseelury 3.Prolem solving
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D. Phani

Principal  
Govt. College Bishrampur  
Distt.-Surajpur(C.G.)

## TEACHING PLAN

ACADEMIC YEAR-2018-19

COURSE TYPE- THEORY

NAME OF DEPARTMENT-ZOOLOGY

PAPER I / II

CLASS-B.SC-3rd

NAME OF TEACHER -D.P.KORI

COURSE CODE/TITLE-ECOLOGY, ENVIRONMENTAL BIOLOGY: TOXICOLOGY

MICROBIOLOGY AND MEDICAL ZOOLOGY / GENETIC, CELL PHYSIOLOGY,

BIOTECHNOLOGY AND BIOTECHNIQUES

MOUNTH/WE EK	UNIT TITTLE	TOPIC OF LECTURE	NO.OF LECT.	METHODS
SEPTEMBER	UNIT-1 <sup>st</sup>	1.Aims and scopes of ecology 2. major ecosystems of the world-Brief introduction 3. population characteristics and regulation of densities 4. communities and ecosystem 5.Bio – geo chemical cycles 6. Air & water pollution 7. Ecological succession	10	1.Chaked talic method 2.grop Disseelury 3.Prolem solving
OCTOBER	UNIT- 2 <sup>nd</sup>  UNIT- 3 <sup>rd</sup>	1.Laws of limiting factor 2. Food chain and fresh water ecosystem 3. Energy flow in ecosystem – trophic levels 4. convervation of natural resources 5. environmental impact assessment  1.Definition and classification of toxicants 2.Basic concept of toxicology 3.principal of systematic toxicology 4.havy mattle toxicity(Arsenic, mercury, lead cadmium) 5.animal poisons- snake venom, scorpion& be poisoning	30	1.Chaked talic method 2.grop Disseelury 3.Prolem solving

NOVEMBER	UNIT-4 <sup>th</sup>	1.General and applied, microbiology 2.microbiology of domestic water and sewage 3.Microbiology of milk & milk products 4.Industrial microbiology: fermentation process, production of penicillin, alcoholic beverages, bleaching.	30	1.Chaked talc method 2.grop Disseelury 3.Prolem solving
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D. Meena

~~Prashant~~  
Govt. College Bishraopur  
Distt.-Surajpur(C.G.)

## TEACHING PLAN

ACADEMIC YEAR-2019-20

COURSE TYPE- THEORY

NAME OF DEPARTMENT-ZOOLOGY

CLASS-B.SC-3rd

PAPER I / II

NAME OF TEACHER -D.P.KORI

COURSE CODE/TITLE-ECOLOGY, ENVIRONMENTAL BIOLOGY: TOXICOLOGY

MICROBIOLOGY AND MEDICAL ZOOLOGY / GENETIC, CELL PHYSIOLOGY,

BIOTECHNOLOGY AND BIOTECHNIQUES

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SEPTEMBER	UNIT-1 <sup>st</sup>	1.Aims and scopes of ecology 2. major ecosystems of the world-Brief introduction 3. population characteristics and regulation of densities 4. communities and ecosystem 5.Bio – geo chemical cycles 6. Air & water pollution 7. Ecological succession	10	1.Chaked talic method 2.grop Disseelury 3.Prolem solving
OCTOBER	UNIT- 2 <sup>nd</sup>  UNIT- 3 <sup>rd</sup>	1.Laws of limiting factor 2. Food chain and fresh water ecosystem 3. Energy flow in ecosystem – trophic levels 4. convervation of natural resources 5. environmental impact assessment 1.Definition and classification of toxicants 2.Basic concept of toxicology 3.principal of systematic toxicology 4.havy mattle toxicity(Arsenic, mercury, lead cadmium) 5.animal poisons- snake venom, scorpion& be poisoning	30	1.Chaked talic method 2.grop Disseelury 3.Prolem solving

NOVEMBER	UNIT- 4 <sup>th</sup>	1.General and applied, microbiology 2.microbiology of domestic water and sewage 3.Microbiology of milk & milk products 4.Industrial microbiology: fermentation process, production of penicillin, alcoholic beverages, bioleaching.	30	1.Chaked talic method 2.grop Disseelury 3.Prolem solving
	UNIT- 5 <sup>th</sup>	1.Brief introduction to pathogenic microorganism Rickettsia, Solrochaetes, AIDS and Typhoid 2.Brief account of life history &pathogenicity of the following pathogens with reference to man: prophylaxis & treatment 3.Pathogenic protozoa's- Entamoeba trypanosome &plasmodium 4.Pathogenic helminthes- Shistosoma 5.Nematode pathogenic parasites of man 6.Vector insects		
DECEMBER	UNIT- 6 <sup>th</sup>	1.Linkege &linkage maps, sex determination and sex linkage 2.Gene interaction -Incomplete dominance & codominance supplementary gene, complementary gene, Epistasis Lethal gene, Pleiotropic gene and multiple alleles. 3.Mutation :Gene and chromosomal mutation 4.Human genetics: chromosomal alterations: Down Edward, Patau, Turner and klinefelter syndrome single gene disorders: Alkaptonuria , Phenylketonuria, sickle cell anemia, albinism and colour blindness	20	1.Chaked talic method 2.grop Disseelury 3.Prolem solving
JANUARY	UNIT- 7 <sup>th</sup>	1.General ideas about pH& buffer 2.tranceport across membrane:Diffusion and osmosis 3.Active transport in mitochondria & endoplasmic	30	1.Chaked talic method 2.grop Disseelury 3.Prolem solving

D. Naru

Principal  
Govt. College Bishrampur  
Distt.-Surajpur(C.G.)

## TEACHING PLAN

ACADEMIC YEAR-2020-21

COURSE TYPE- THEORY

NAME OF DEPARTMENT-ZOOLOGY

CLASS-B.SC-3rd

PAPER I / II

NAME OF TEACHER -D.P.KORI

COURSE CODE/TITLE-ECOLOGY, ENVIRONMENTAL BIOLOGY: TOXICOLOGY

MICROBIOLOGY AND MEDICAL ZOOLOGY / GENETIC, CELL PHYSIOLOGY,

BIOTECHNOLOGY AND BIOTECHNIQUES

MOUNTH/WE EK	UNIT TITTLE	TOPIC OF LECTURE	NO.OF LECT.	METHODS
SEPTEMBER	UNIT-1 <sup>st</sup>	1.Aims and scopes of ecology 2. major ecosystems of the world-Brief introduction 3. population characteristics and regulation of densities 4. communities and ecosystem 5.Bio – geo chemical cycles 6. Air & water pollution 7. Ecological succession	10	1.Chaked talk method 2.grop Disseelury 3.Prolem solving
OCTOBER	UNIT- 2 <sup>nd</sup>	1.Laws of limiting factor 2. Food chain and fresh Water ecosystem 3. Energy flow in ecosystem – trophic levels 4. conservation of natural resources 5. environmental impact assessment	30	1.Chaked talk method 2.grop Disseelury 3.Prolem solving
	UNIT- 3 <sup>rd</sup>	1.Definition and classification of toxicants 2.Basic concept of toxicology 3.principle of systematic toxicology 4.heavy metal toxicity(Arsenic, mercury, lead cadmium) 5.animal poisons- snake venom, scorpion& bee poisoning		

NOVEMBER	UNIT- 4 <sup>th</sup>	1.General and applied, microbiology 2.microbiology of domestic water and sewage 3.Microbiology of milk & milk products 4.Industrial microbiology: fermentation process, production of penicillin, alcoholic beverages, bioleaching.	30	1.Chaked talk method 2.grop Disseelury 3.Prolem solving
	UNIT- 5 <sup>th</sup>	1.Brief Introduction to pathogenic microorganism Rickettsia, Solrochaetes, AIDS and Typhoid 2.Brief account of life history &pathogenicity of the following pathogens with reference to man: prophylaxis & treatment 3.Pathogenic protozoa's- Entamoeba trypanosome &plasmodium 4.Pathogenic helminthes- Shistosoma 5.Nematode pathogenic parasites of man 6.Vector insects		
DECEMBER	UNIT- 6 <sup>th</sup>	1.Linkage &linkage maps, sex determination and sex linkage 2.Gene Interaction-Incomplete dominance & codominance, supplementary gene, complementary gene, Epistasis Lethal gene, Pleiotropic gene and multiple alleles. 3.Mutation :Gene and chromosomal mutation 4.Human genetics: Chromosomal alteration : Down Edward ,Patau, Turner and klinefelter syndrome single gene disorders: Alkaptonuria , Phenylketonuria, sickle cell anemia,albinism and colour blindness	20	1.Chaked talk method 2.grop Disseelury 3.Prolem solving
JANUARY	UNIT- 7 <sup>th</sup>	1.General ideas about pH& buffer 2.tranceport across membrane:Diffusion and osmosis 3.Active transport in mitochondria & endoplasmic	30	1.Chaked talk method 2.grop Disseelury 3.Prolem solving

D.P. Kulkarni

Principal  
Govt. College Bishrampur  
Distt.-Surajpur(C.G.)

## TEACHING PLAN

ACADEMIC YEAR-2021-22

COURSE TYPE- THEORY

NAME OF DEPARTMENT-ZOOLOGY

CLASS-B.SC-2ND

**PAPER I / II**

NAME OF TEACHER -D.P.KORI

COURSE CODE/TITLE-ANATOMY AND PHYSIOLOGYDB

VERTIBATE ENDOCRINOLOGY, REPRODUCTIVE BIOLOGY BEHAVIOUR EVOLUTION AND

APPLIED ZOOLOGY

MOUNTH/WE EK	UNIT TITTLE	TOPIC OF LECTURE	NO.OF LECT.	METHODS
SEPTEMBER	UNIT- 1ST	1.Integument and its derivatives: structure of scales,hair and feather 2.alimentaey canal and digestive glands in vertebrates 3.respiratory organs:gills and lung,air-sac in birds	10	1.Chaked talic method 2.grop Disseelury 3.Prolem solving
OCTOBER	UNIT- 2 <sup>ND</sup>  UNIT- 3 <sup>RD</sup>	1.Endoskeleton :(a)Axial Skeleton —skull and vertebrae ,(b)Appendicular Skeleton Limbs and girdles 2.Circulatory Syestam:Evolution of heart and aortic arches 3.Urinogenital Syestam :Kindey and excretory ducts	20	1.Chaked talic method 2.grop Disseelury 3.Prolem solving
NOVEMBER	UNIT- 4 <sup>TH</sup>	1.Digestion and absorption of dietary compnents .. 2.physiology of heart,cardiac cycle and ECG 3.blood coagulation 4.Resiration :mechanism and control of breathings	30	1.Chaked talic method 2.grop Disseelury 3.Prolem solving
DECEMBER	UNIT- 5 <sup>TH</sup>	1.Excretion:Physiology of excretion,osmoregulation 2.Physiology of muscle contraction 3.Physiology of nerve impulse,Synaptic transmission	20	1.Chaked talic method 2.grop Disseelury 3.Prolem solving

JANUARY	UNIT- 6 <sup>TH</sup> Unit 1	1.Structure and function of Endocrine glands 2.Hormone receptor 3.Biosynthesis and secretion of thyroid,adrenal ,ovarian and testicular hormones 4.Endocrine disorder of pituitary,thyroid ,adrenal and pancreas	30	1.Chaked talk method 2.grop Disseelury 3.Prolem solving
		1.Reproductive cycle in vertebrates 2.Menstruation,lactation and pregnancy 3.Mechanism of parturition 4.Hormone regulation of gametogenesis		
FEBRUARY	UNIT- 7 <sup>TH</sup> UNIT 3.	1.Evidences of organic evolution. 2.Theories of organic evolution. 3.Variation,Mutation and Isolation and natural selection. 4.Evolution of Horse	25	1.Chaked talk method 2.grop Disseelury 3.Prolem solving
		1.introduction to Ethology:Branches and concept of ethology. 2.Patterns of Behaviour,Taxes,Reflexes,Drives and stereotyped behavior. 3.Reproductive behavioural patterns. 4.drugs and behavior,Hormone and behavior 1.Prawn culture 2.Sericulture 3.Apiculture 4.Pisciculture 5.Poultry keeping 6.Elements of pest control:chemical and Biological control		

D.P.Kori  
NAME OF TEACHER

J.Mitra  
NAME OF HOD

PRINCIPAL  
Principal  
College Bishrampur  
Distt.-Surajpur(C.G)

# Teaching Plan

Academic Year: 2017-18

**Name of Department: ZOOLOGY**

**Name of Teacher: D.P. KORI**

**Class: B.SC. PART- I**

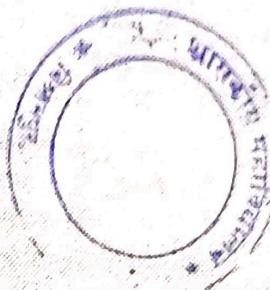
**Subject: ZOOLOGY Paper I**

**Course Type: Theory**

**Course Code / Title: Cell Biology and Non-chordata**

Month/Week	Unit/ Title	Topic of Lecture	No. of lectures	Methods/Mode of Delivery
SEPTEMBER	Unit I	1. The cell (Prokaryotic and Eukaryotic) 2. Organization of Cell: Extra-nuclear and nuclear. Plasma membrane. Mitochondria, Endoplasmic reticulum, Golgi body, Ribosome and Lysosome. 3. Nucleus, Chromosomes, DNA and RNA	10	1. Chalk and talk method 2. Group discussion 3. Problem Solving
OCTOBER	Unit II	1. Cell division (Mitosis and Meiosis). 2. An elementary idea of Cancer cells And Cell transformation. 3. An elementary idea of Immunity: Innate & Acquired Immunity, Lymphoid organs, Cells of Immune System, Antigen, antibody and their interactions	13	1 . Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving
NOVEMBER	Unit III	General characters and classification of Phylum Protozoa, Porifera, and Coelenterata up to order. 1. Protozoa: Type study - Paramecium. 2. Porifera: Type study - Sycon.	10	1 . Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving
DECEMBER	Unit III & IV	3. Coelenterata: Type study - Obelia. 1. General characters and classification of Phylum Platyhelminthes, Nemathelminthes, Annelida and Arthropoda up to order. 2. Arthropoda: Type Study - Palaemon.	12	1 . Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving

JANUARY	Unit IV & V	1. Platyhelminthes and Nemathelminthes; Type Study - Fasciola, Ascaris 2. Annelida: Type Study - Pheretima. 3. General characters and classification of Phylum Mollusca and Echinodermata up to order.	12	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving
FEBRUARY	Unit V	2. Mollusca: Type Study - Pila. 3. Echinodermata- Type Study- Asterias (Starfish).	12	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving



D. P. Koiri  
Signature of Teacher

D. P. Koiri  
(D. P. Koiri)  
Signature of Head

X  
Signature of Principal  
Principal

# Teaching Plan

Academic Year: 2017-18

Name of Department: ZOOLOGY

Class: B.Sc. PART-I, Course Type: Practical

Month/Week	Laboratory Work	Methods/Mode of Delivery
SEPTEMBER	List of museum specimens invertebrates- Amphioxus, Ascaris (Male/Female), Asterias (Starfish), Centipede, Cockroach, Crab, Earthworm, Euspongia, Honey Bee, Hydra, Liver fluke, Millipede, Sycon, Water beetle ( <i>Hydrophilus piecus</i> ), Petromyzon, Myxine, Nereis, Octopus, Oyster, Palaemon, Pennatula Pila, Planaria, Salpa, Sea Anemone, Sea Urchin, Sepia, Spongilla, Tapeworm, Unio.	Demonstration, video mode and self-practice
OCTOBER	Life cycle of Mosquito Life Cycle of Drosophila Life Cycle of Honey Bee	Demonstration, video mode and self-practice
NOVEMBER	1. List of museum specimens vertebrates- Anabas, Bat, Bufo, Calotes, Frog ( <i>Rana tigrina</i> ), Hippocampus, Hyla, Mhur ( <i>Clarias batrachus</i> ), Rohu ( <i>Labeo rohita</i> ), Scoliodon, Torpedo (Electric ray), Warbler (Bird), Molley, Betta fish, Garra gatyla (Hillstream fish)	Demonstration, video mode and self-practice
DECEMBER	Dissection (Major and minor-Virtual). 1. Whole anatomy of Earthworm 2. Digestive system of Earthworm 3. Nervous system of Earthworm 4. Mouth parts of male & female Mosquito 4. Radula of Pila	Demonstration, video mode and self-practice

JANUARY	<p>5. Adaptation:-</p> <ol style="list-style-type: none"> <li>I. Adoptive characters of aquatic animal whale (Dolphin/ Duck)</li> <li>II. Adoptive characters of terrestrial animal (Horse, Man, etc.)</li> <li>III. Adoptive characters of aerial animal (Birds)</li> <li>IV. Adoptive characters of Desert animal (Camel/desert rat).</li> </ol>	Demonstration, video mode and self-practice
FEBRUARY	<p>6. Permanent Slides:-</p> <ol style="list-style-type: none"> <li>I. Mitosis stages.</li> <li>II. Meiosis stages.</li> <li>III. Chick Embryo development stages- 12 24 hours, 48 hours, 96 hours.</li> </ol> <p>Evaluation of the practical records and projects</p>	Demonstration, video mode and self-practice

D. P. Kori  
Signature of Teacher

D. P. Kori  
Signature of Head

Y. P. E.  
Signature of Principal

Govt. Of India  
Ministry of Education  
Curriculum & Pedagogy

# Teaching Plan

Academic Year: 2018-19

Name of Department: ZOOLOGY

Name of Teacher: D.P. KORI

Class: B.SC. PART - I

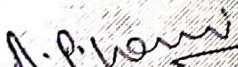
Subject: ZOOLOGY Paper I

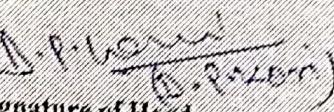
Course Type: Theory

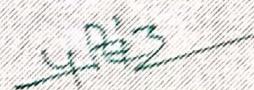
Course Code / Title: Cell Biology and Non-chordata

Month/Week	Unit/ Title	Topic of Lecture	No. of lectures	Methods/Mode of Delivery
SEPTEMBER	Unit I	1. The cell (Prokaryotic and Eukaryotic) 2. Organization of Cell: Extra-nuclear and nuclear, Plasma membrane, Mitochondria, Endoplasmic reticulum, Golgi body, Ribosome and Lysosome). 3. Nucleus, Chromosomes, DNA and RNA	10	1. Chalk and talk method 2. Group discussion 3. Problem Solving
OCTOBER	Unit II	1. Cell division (Mitosis and Meiosis). 2. An elementary idea of Cancer cells And Cell transformation. 3. An elementary idea of immunity: Innate & Acquired Immunity, Lymphoid organs, Cells of Immune System, Antigen, antibody and their interactions	13	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving
NOVEMBER	Unit III	General characters and classification of Phylum Protozoa, Porifera, and Coclenenterata up to order. 1. Protozoa: Type study - Paramecium, 2. Porifera: Type study - Sycon.	10	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving
DECEMBER	Unit III & IV	3. Coclenenterata: Type study - Obelia 1. General characters and classification of Phylum Platyhelminthes, Nemathelminthes, Annelida and Arthropoda up to order. 2. Arthropoda: Type Study - Palaemon.	12	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving

JANUARY	Unit IV & V	1. Platyhelminthes and Nemathelminthes; Type Study - Fasciola, Ascaris 2. Annelida: Type Study - Pheretima. 3. General characters and classification of Phylum Mollusca and Echinodermata up to order.	12	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving
FEBRUARY	Unit V	2. Mollusca: Type Study - Pila. 3. Echinodermata- Type Study- Asterias (Starfish).	12	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving

  
Signature of Teacher

  
Signature of Head

  
Signature of Principal

DATE: 20/02/2016  
DRAFT NO.: 00000000000000000000000000000000

## Teaching Plan

Academic Year: 2018-19

Name of Department: ZOOLOGY

Class: B.Sc. PART-I, Course Type: Practical

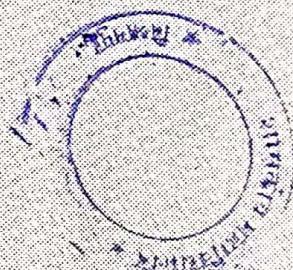
Month/Week	Laboratory Work	Methods/Mode of Delivery
SEPTEMBER	List of museum specimens invertebrates- Amphioxus, Ascaris (Male/Female), Asterias (Starfish), Centipede, Cockroach, Crab, Earthworm, Euspongia, Honey Bee, Hydra, Liver fluke, Millipede, Sycon, Water beetle ( <i>Hydrophilus piceus</i> ), Petromyzon, Myxine, Nereis, Octopus, Oyster, Palaemon, Pennatula Pila, Planaria, Salpa, Sea Anemone, Sea Urchin, Sepia, Spongilla, Tapeworm, Unio.	Demonstration, video mode and self-practice
OCTOBER	Life cycle of Mosquito Life Cycle of Drosophila Life Cycle of Honey Bee	Demonstration, video mode and self-practice
NOVEMBER	1. List of museum specimens vertebrates- Anabas, Bat, Bufo, Calotes, Frog ( <i>Rana tigrina</i> ), Hippocampus, Hyla, Magur ( <i>Clarias batrachus</i> ), Rohu ( <i>Labeo rohita</i> ), Scoliodon, Torpedo (Electric ray), Warbler (Bird), Molley, Betta fish, Garra gatyla (Hillstream fish)	Demonstration, video mode and self-practice
DECEMBER	Dissection (Major and minor-Virtual): 1. Whole anatomy of Earthworm 2. Nervous system of Earthworm 3. Mouth parts of male & female Mosquito 4. Radula of Pila	Demonstration, video mode and self-practice

JANUARY	<p>5. Adaptation:-</p> <ol style="list-style-type: none"> <li>I. Adoptive characters of aquatic animal whale (Dolphin/ Duck)</li> <li>II. Adoptive characters of terrestrial animal (Horse, Man, etc.)</li> <li>III. Adoptive characters of aerial animal (Birds)</li> <li>IV. Adoptive characters of Desert animal (Camel/desert rat).</li> </ol>	Demonstration, video mode and self-practice
FEBRUARY	<p>6. Permanent Slides:-</p> <ol style="list-style-type: none"> <li>I. Mitosis stages.</li> <li>II. Meiosis stages.</li> <li>III. Chick Embryo development stages- 12 24 hours, 48 hours, 96 hours.</li> </ol> <p>Evaluation of the practical records and projects</p>	Demonstration, video mode and self-practice

J. Pham  
Signature of Teacher

J. Pham  
Signature of Head

J. Pham  
Signature of Principal



# Teaching Plan

Academic Year: 2019-20

**Name of Department: ZOOLOGY**

**Name of Teacher: D.P. KORI**

**Class: B.SC. PART - I**

**Subject: ZOOLOGY Paper I**

**Course Type: Theory**

**Course Code / Title: Cell Biology and Non-chordata**

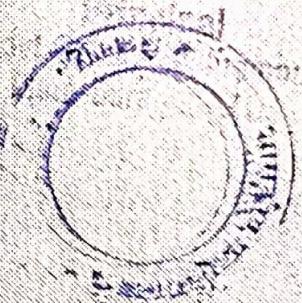
Month/Week	Unit/ Title	Topic of Lecture	No. of lectures	Methods/Mode of Delivery
SEPTEMBER	Unit I	1. The cell (Prokaryotic and Eukaryotic) 2. Organization of Cell: Extra-nuclear and nuclear, Plasma membrane, Mitochondria, Endoplasmic reticulum, Golgi body, Ribosome and Lysosome. 3. Nucleus, Chromosomes, DNA and RNA	10	1. Chalk and talk method 2. Group discussion 3. Problem Solving
OCTOBER	Unit II	1. Cell division (Mitosis and Meiosis). 2. An elementary idea of Cancer cells And Cell transformation. 3. An elementary idea of Immunity: Innate & Acquired Immunity, Lymphoid organs, Cells of Immune System, Antigen, antibody and their interactions	13	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving
NOVEMBER	Unit III	General characters and classification of Phylum Protozoa, Porifera, and Coelenterata up to order. 1. Protozoa: Type study - Paramecium, 2. Porifera: Type study - Sycon.	10	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving
DECEMBER	Unit III & IV	3. Coelenterata: Type study - Obelia 1. General characters and classification of Phylum Platyhelminthes, Nemathelminthes, Annelida and Arthropoda up to order. 2. Arthropoda: Type Study - Palaemon.	12	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving

JANUARY	Unit IV & V	1. Platyhelminthes and Nemathelminthes: Type Study - Fasciola, Ascaris 2. Annelida: Type Study - Pheretima. 1. General characters and classification of Phylum Mollusca and Echinodermata up to order.	12	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving
FEBRUARY	Unit V	2. Mollusca: Type Study - Pila. 3. Echinodermata- Type Study- Asterias (Starfish).	12	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving

J. Morai  
Signature of Teacher

J. Morai  
(D. P. X. O. R. I.)  
Signature of Head

H. D. B.  
Signature of Principal



## Teaching Plan

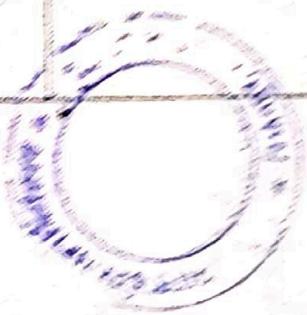
Academic Year: 2019-20

Name of Department: ZOOLOGY

Class: B.Sc. PART-I, Course Type: Practical

Month/Week	Laboratory Work	Methods/Mode of Delivery
SEPTEMBER	List of museum specimens invertebrates- Amphioxus, Ascaris (Male/Female), Asterias (Starfish), Centipede, Cockroach, Crab, Earthworm, Euspongia, Honey Bee, Hydra, Liver fluke, Millipede, Sycon, Water beetle ( <i>Hydrophilus piceus</i> ), Petromyzon, Myxine, Nereis, Octopus, Oyster, Palaemon, Pennatula Pila, Planaria, Salpa, Sea Anemone, Sea Urchin, Sepia, Spongilla, Tapeworm, Unio.	Demonstration, video mode and self-practice
OCTOBER	Life cycle of Mosquito Life Cycle of Drosophila Life Cycle of Honey Bee	Demonstration, video mode and self-practice
NOVEMBER	1. List of museum specimens vertebrates- Anabas, Bat, Bufo, Calotes, Frog ( <i>Rana tigrina</i> ), Hippocampus, Hyla, Magur ( <i>Clarias batrachus</i> ), Rohu ( <i>Labeo rohita</i> ), Scoliodon, Torpedo (Electric ray), Warbler (Bird), Molley, Betta fish, Garra gatyls (Hillstream fish)	Demonstration, video mode and self-practice
DECEMBER	Dissection (Major and minor-Virtual): 1. Whole anatomy of Earthworm 2. Digestive system of Earthworm 3. Nervous system of Earthworm 4. Mouth parts of male & female Mosquito 4. Radula of Pila	Demonstration, video mode and self-practice

JANUARY	3. Mammals:- I. Mammal characters of aquatic animal whale (Dolphin/ Duck); II. Mammal characters of terrestrial animal (Lion, Man, etc.) III. Mammal characters of arctic animal (Woods) IV. Mammal characters of Deserts animal (Camel/brown rat).	Demonstration, slides made and self-explanatory.
FEBRUARY	4. Permanent Stages:- I. Muscular stages. II. Melanin stages. III. Chick Embryo development stages - 12 24 hours, 48 hours, 96 hours. Examination of the practical records and projects	Demonstration, slides made and self-explanatory.



Signature of Teacher



Signature of Teacher

  
Principal

Signature of Principal

# Teaching Plan

Academic Year: 2020-21

**Name of Department:** ZOOLOGY

**Name of Teacher:** D.P. KORI

**Class:** B.SC. PART- I

**Subject:** ZOOLOGY Paper I

**Course Type:** Theory

**Course Code / Title:** Cell Biology and Non-chordata

Month/Week	Unit/ Title	Topic of Lecture	No. of lectures	Methods/Mode of Delivery
SEPTEMBER	Unit I	1. The cell (Prokaryotic and Eukaryotic) 2. Organization of Cell: Extra-nuclear and nuclear, Plasma membrane, Mitochondria, Endoplasmic reticulum, Golgi body, Ribosome and Lysosome). 3. Nucleus, Chromosomes, DNA and RNA	10	1. Chalk and talk method 2. Group discussion 3. Problem Solving
OCTOBER	Unit II	1. Cell division (Mitosis and Meiosis). 2. An elementary idea of Cancer cells And Cell transformation. 3. An elementary idea of immunity: Innate & Acquired Immunity, Lymphoid organs, Cells of Immune System, Antigen, antibody and their interactions	13	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving
NOVEMBER	Unit III	General characters and classification of Phylum Protozoa, Porifera, and Coelenterata up to order. 1. Protozoa: Type study - Paramecium, 2. Porifera: Type study - Sycon.	10	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving
DECEMBER	Unit III & IV	3. Coelenterata: Type study - Obelia. 1. General characters and classification of Phylum Platyhelminthes, Nemathelminthes, Annelida and Arthropoda up to order. 2. Arthropoda: Type Study - Palaemon.	12	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving

JANUARY	Unit IV & V	1. Platyhelminthes and Nemathelminthes; Type Study - Fasciola, Ascaris 2. Annelida: Type Study - Pheretima. 1. General characters and classification of Phylum Mollusca and Echinodermata up to order.	12	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving
FEBRUARY	Unit V	2. Mollusca: Type Study - Pila. 3. Echinodermata- Type Study- Asterias (Starfish).	12	1 . Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving



D. P. Kaur  
Signature of Teacher

D. P. Kaur (B. P. Kaur)  
Signature of Head

Dr. S. K. Dahiya  
Signature of Principal

# Teaching Plan

Academic Year: 2020-21

**Name of Department: ZOOLOGY**

**Class: B.Sc. PART-I, Course Type: Practical**

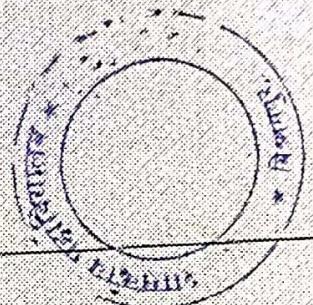
Month/Week	Laboratory Work	Methods/Mode of Delivery
SEPTEMBER	List of museum specimens invertebrates- Amphioxus, Ascaris (Male/Female), Asterias (Starfish), Centipede, Cockroach, Crab, Earthworm, Euspongia, Honey Bee, Hydra, Liver fluke, Millipede, Sycon, Water beetle ( <i>Hydrophilus piceus</i> ), Petromyzon, Myxine, Nereis, Octopus, Oyster, Palaemon, Pennatula Pila, Planaria, Salpa, Sea Anemone, Sea Urchin, Sepia, Spongilla, Tapeworm, Unio.	Demonstration, video mode and self-practice
OCTOBER	Life cycle of Mosquito Life Cycle of Drosophila Life Cycle of Honey Bee	Demonstration, video mode and self-practice
NOVEMBER	1. List of museum specimens vertebrates- Anabas, Bat, Bufo, Calotes, Frog ( <i>Rana tigrina</i> ), Hippocampus, Hyla, Magur ( <i>Clarias batrachus</i> ), Rohu ( <i>Labeo rohita</i> ), Scoliodon, Torpedo (Electric ray), Warbler (Bird), Molley, Betta fish, Garra gatyla (Hillstream fish)	Demonstration, video mode and self-practice
DECEMBER	Dissection (Major and minor-Virtual): 1. Whole anatomy of Earthworm Digestive system of Earthworm 2. Nervous system of Earthworm 3. Mouth parts of male & female Mosquito 4. Radula of Pila	Demonstration, video mode and self-practice

JANUARY

5. Adaptation:-	I. Adoptive characters of aquatic animal whale (Dolphin/ Duck) II. Adoptive characters of terrestrial animal (Horse, Man, etc.) III. Adoptive characters of aerial animal (Birds) IV. Adoptive characters of Desert animal (Camel/desert rat).	Demonstration, video mode and self-practice
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FEBRUARY

6. Permanent Slides:-	I. Mitosis stages. II. Meiosis stages. III. Chick Embryo development stages- 12 24 hours, 48 hours, 96 hours. Evaluation of the practical records and projects	Demonstration, video mode and self-practice
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Signature of Teacher

*J. Rani (T.S.T.V.C)*  
Signature of Head

*X 202*  
Signature of Principal

# Teaching Plan

Academic Year: 2021-22

**Name of Department: ZOOLOGY**

**Name of Teacher: D.P. KORI**

**Subject: ZOOLOGY Paper I**

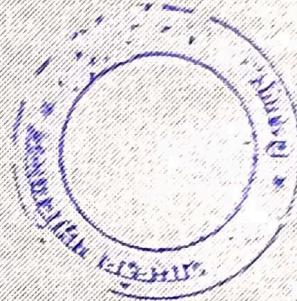
**Class: B.SC. PART-I**

**Course Type: Theory**

**Course Code / Title: Cell Biology and Non-chordata**

Month/Week	Unit/ Title	Topic of Lecture	No. of lectures	Methods/Mode of Delivery
SEPTEMBER	Unit I	1. The cell (Prokaryotic and Eukaryotic) 2. Organization of Cell: Extra-nuclear and nuclear, Plasma membrane, Mitochondria, Endoplasmic reticulum, Golgi body, Ribosome and Lysosome. 3. Nucleus, Chromosomes, DNA and RNA	10	1. Chalk and talk method 2. Group discussion 3. Problem Solving
OCTOBER	Unit II	1. Cell division (Mitosis and Meiosis). 2. An elementary idea of Cancer cells And Cell transformation. 3. An elementary idea of Immunity: Innate & Acquired Immunity, Lymphoid organs, Cells of Immune System, Antigen, antibody, and their interactions	13	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving
NOVEMBER	Unit III	General characters and classification of Phylum Protozoa, Porifera, and Coelenterata up to order. 1. Protozoa: Type study - Paramecium, 2. Porifera: Type study - Spongia	10	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving
DECEMBER	Unit III & IV	3. Coelenterata: Type study - Obelia 1. General characters and classification of Phylum Platyhelminthes, Nemathelminthes, Annelida and Arthropoda up to order. 2. Arthropoda: Type Study - Palaemon	12	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving

JANUARY	Unit IV & V	1. Platyhelminthes and Nemathelminthes; Type Study - Fasciola, Ascaris 2. Annelida: Type Study - Pheretima. 1. General characters and classification of Phylum Mollusca and Echinodermata up to order.	12	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving
FEBRUARY	Unit V	2. Mollusca: Type Study - Pila. 3. Echinodermata- Type Study- Asterias (Starfish).	12	1. Chalk and talk method 2. Flip the class 3. Group discussion 4. Problem Solving



*J. Perumal*  
Signature of Teacher

*D. N. Raja (A. P. Veni)*  
Signature of Head

*4/23*  
Signature of Principal

*Govt. of India*

## Teaching Plan

Academicle Year 2021-22

**Name of Department: ZOOLOGY**

**Class: B.Sc. PART-I, Course Type Practical**

Month/Week	Laboratory Work	Methods/Mode of Delivery
SEPTEMBER	List of museum specimens Invertebrates- Amphioxus, Ascaris (Male/Female), Asterias (Starfish), Centipede, Cockroach, Crab, Earthworm, Euspongia, Honey Bee, Hydra, Liver fluke, Millipede, Sycon, Water beetle ( <i>Hydrophilus piceus</i> ), Petromyzon, Myxine, Nereis, Octopus, Oyster, Palaemon, Pennatula Pila, Planaria, Salpa, Sea Anemone, Sea Urchin, Sepia, Spongilla, Tapeworm, Unio.	Demonstration, video mode and self-practice
OCTOBER	Life cycle of Mosquito Life Cycle of Drosophila Life Cycle of Honey Bee	Demonstration, video mode and self-practice
NOVEMBER	1. List of museum specimens vertebrates- Anabas, Bat, Bufo, Calotes, Frog ( <i>Rana tigrina</i> ), Hippocampus, Hyla, Magur ( <i>Clarias batrachus</i> ), Rohu ( <i>Labeo rohita</i> ), Scoliodon, Torpedo (Electric ray), Warbler (Bird), Molley, Beta fish, Garra gatyla (Hillstream fish)	Demonstration, video mode and self-practice
DECEMBER	Dissection (Major and minor-Virtual): 1. Whole anatomy of Earthworm 2. Digestive system of Earthworm 3. Nervous system of Earthworm 4. Mouth parts of male & female Mosquito 4. Radula of Pila	Demonstration, video mode and self-practice

JANUARY	5. Adaptation:- I. Adoptive characters of aquatic animal whale (Dolphin/ Duck) II. Adoptive characters of terrestrial animal (Horse, Man, etc.) III. Adoptive characters of aerial animal (Birds) IV. Adoptive characters of Desert animal (Camel/desert rat).	Demonstration, video mode and self-practice
FEBRUARY	6. Permanent Slides:- I. Mitosis stages. II. Meiosis stages. III. Chick Embryo development stages- 12 24 hours, 48 hours, 96 hours. Evaluation of the practical records and projects	Demonstration, video mode and self-practice

*J. Patel*  
Signature of Teacher.

*J. Patel (H.M.T.)*  
Signature of Head

*4722*  
Signature of Principal

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