

## Lesson Plan

Name of College: Pt. N.R.S. Govt. College

Academic session- 2024-25

Semester: Odd

Name of Teacher: Neeraj Devi

Class: (B.Sc.Chem.Hons.2nd year)

Week	
1 <sup>st</sup> Week (22-27 July)	Introduction to Endocrine System
28 Sunday	
2 <sup>nd</sup> Week (29 July-3 August)	Histology and functions of endocrine glands;
04 Sunday	
3 <sup>rd</sup> Week (05-10 Aug)	Nature of hormones; Mode of action of hormones
11 Aug Sunday	
4 <sup>th</sup> Week (12-17 Aug)	Hypothalamus-principal nuclei involved in control of endocrine system
15 Aug 18 Aug Sunday	
5 <sup>th</sup> Week (19-24 Aug)	Control of anterior pituitary hormones by hypothalamic releasing hormones
25 Aug Sunday	
6 <sup>th</sup> Week (26-31 Aug)	Histology of different types of muscle Ultrastructure of skeletal muscle
1 Sept Sunday	
7 <sup>th</sup> Week (02-07 Sept)	Characteristics of muscle twitch; Motor unit. Molecular and chemical basis of muscle contraction
08 Sept Sunday	
8 <sup>th</sup> Week (09-14 Sept)	Physiology of male and female reproduction; Methods of contraception Disorders of reproductive system
15 Sept Sunday	
9 <sup>th</sup> Week (16-21 Sept)	Histology of male and female reproductive system, puberty
22 Sept Sunday	
10 <sup>th</sup> Week (23-28 Sept)	General organization of nervous system
29 Sept Sunday	
11 <sup>th</sup> Week (30 Sept-05 Oct)	Neuron resting membrane potential and its basis;
02 Oct 06 Oct Sunday	

12 <sup>th</sup> Week(07-12Oct)	Origin of action potential and Its propagation in myelinated and unmyelinated nerve fibers;
13OctSunday	
13 <sup>th</sup> Week(14-19Oct)	Synaptic transmission and types of synapses,
20OctSunday	
14 <sup>th</sup> Week(21-26Oct)	Neuro-muscular junction;Physiology of hearing and vision.Structure and types of mode of digestive system and its glands
27Oct-03Nov	DIWALIHOLIDAYS
16 <sup>th</sup> Week(04-09Nov)	Process of digestion,assimilation and various disorders.
10 NovSunday	
17 <sup>th</sup> Week(11-16Nov)	Structure and function of respiratory system;Control and coordination of respiration.
17 NovSunday	
18 <sup>th</sup> Week(18-22Nov)	REVISION
23Nov-20Dec	University exam

## **Lesson Plan**

**Name of College: Pt. N.R.S. Govt. College**

**Academic session- 2024-25**

**Semester: Odd**

**Name of Teacher:Dr.Amit Dev**

**Class:B.Sc. 1<sup>st</sup> DSC**

**Section-C**

Week	
1 <sup>st</sup> Week (22-27July)	General characters of protozoans Classification ,Biodiversity, <i>Plasmodium</i> introduction:
28Sunday	
2 <sup>nd</sup> Week (29July-3August)	Lifecycle of <i>Plasmodium</i> , distribution and economic importance , Life history of <i>Entamoeba</i>
04Sunday	
3 <sup>rd</sup> Week(05- 10Aug)	<i>Entamoeba</i> :Mode of infection ,Pathogenecity, Life history of <i>Trypanosoma</i> ,
11AugSunday	
4 <sup>th</sup> Week (12- 17Aug)	Mode of infection and pathogenicity, General characters and classification of Porifera
15Aug,18Aug Sunday	
5 <sup>th</sup> Week (19- 24Aug)	Canal system in sponges, Spicules in sponges General characters and classification up to order level
25AugSunday	
6 <sup>th</sup> Week (26- 31Aug)	Test and assignment
1SeptSunday	
7 <sup>th</sup> Week (02- 07Sept)	Corals and coral reefs, General characters of Helminthes,Classification of Helminthes, <i>Fasciola hepatica</i> general character
08Sept Sunday	
8 <sup>th</sup> Week (09- 14Sept)	polymprphism in siphonophores, Type study <i>Fasciola</i> <i>hepatica</i> , Helminthes parasite: <i>Ancylostoma</i>
15Sept Sunday	
9 <sup>th</sup> Week (16- 21Sept)	Helminthes parasite: <i>Wuchereria</i> , General characters of Phylum Annelida, Classification of Phylum Annelida
22Sept Sunday	
10 <sup>th</sup> Week(23- 28Sept)	Metamerism in Annelids,General characters of Arthropoda
29SeptSunday	
11 <sup>th</sup> Week (30Sept-05Oct)	Classification of Phylum Arthropoda,General Characters of Cockroach
02Oct 06OctSunday	

12 <sup>th</sup> Week(07-12Oct)	Type study of Cockroach,General Characters of Phylum Mollusca,Torsion and detorsion in gastropods
13OctSunday	
13 <sup>th</sup> Week(14-19Oct)	Classification of Phylum Mollusca,Torsion and detorsion in gastropoda,General Characters of Phylum Echinodermata
20OctSunday	
14 <sup>th</sup> Week(21-26Oct)	Classification of Phylum Echinodermata,Sea Star general characters,Type study Asterias
27Oct-03Nov	DIWALI HOLIDAYS
16 <sup>th</sup> Week(04-09Nov)	Test and assignments
10 NovSunday	
17 <sup>th</sup> Week(11-16Nov)	Water vascular system in Echinodermates,General,characters of Phylum Hemichordata
17 NovSunday	
18 <sup>th</sup> Week(18-22Nov)	REVISION
23Nov-20Dec	University exam

## **Lesson Plan**

**Name of College: Pt. N.R.S. Govt. College**

**Academic session- 2024-25**

**Semester: Odd**

**Name of Teacher: Ravina**

**Class: B.Sc. 1<sup>st</sup> DSC**

**Section-B**

Week	
1 <sup>st</sup> Week (22-27July)	General characters of protozoans Classification ,Biodiversity, <i>Plasmodium</i> introduction:
28Sunday	
2 <sup>nd</sup> Week (29July-3August)	Lifecycle of <i>Plasmodium</i> , distribution and economic importance , Life history of <i>Entamoeba</i>
04Sunday	
3 <sup>rd</sup> Week(05-10Aug)	<i>Entamoeba</i> :Mode of infection ,Pathogenicity, Life history of <i>Trypanosoma</i> ,
11AugSunday	
4 <sup>th</sup> Week (12-17Aug)	Mode of infection and pathogenicity, General characters and classification of Porifera
15Aug,18Aug Sunday	
5 <sup>th</sup> Week (19-24Aug)	Canal system in sponges, Spicules in sponges General characters and classification up to order level
25AugSunday	
6 <sup>th</sup> Week (26-31Aug)	Test and assignment
1SeptSunday	
7 <sup>th</sup> Week (02-07Sept)	Corals and coral reefs, General characters of Helminthes,Classification of Helminthes, <i>Fasciola hepatica</i> general character
08Sept Sunday	
8 <sup>th</sup> Week (09-14Sept)	polymprphism in siphonophores, Type study <i>Fasciola hepatica</i> , Helminthes parasite: <i>Ancylostoma</i>
15Sept Sunday	
9 <sup>th</sup> Week (16-21Sept)	Helminthes parasite: <i>Wuchereria</i> , General characters of Phylum Annelida, Classification of Phylum Annelida
22Sept Sunday	
10 <sup>th</sup> Week(23-28Sept)	Metamerism in Annelids,General characters of Arthropoda
29SeptSunday	
11 <sup>th</sup> Week (30Sept-05Oct)	Classification of Phylum Arthropoda,General Characters of Cockroach
02Oct 06OctSunday	

12 <sup>th</sup> Week(07-12Oct)	Type study of Cockroach,General Characters of Phylum Mollusca,Torsion and detorsion in gastropods
13OctSunday	
13 <sup>th</sup> Week(14-19Oct)	Classification of Phylum Mollusca,Torsion and detorsion in gastropoda,General Characters of Phylum Echinodermata
20OctSunday	
14 <sup>th</sup> Week(21-26Oct)	Classification of Phylum Echinodermata,Sea Star general characters,Type study Asterias
27Oct-03Nov	DIWALI HOLIDAYS
16 <sup>th</sup> Week(04-09Nov)	Test and assignments
10 NovSunday	
17 <sup>th</sup> Week(11-16Nov)	Water vascular system in Echinodermates,General,characters of Phylum Hemichordata
17 NovSunday	
18 <sup>th</sup> Week(18-22Nov)	REVISION
23Nov-20Dec	University exam

## **Lesson Plan**

**Name of College: Pt. N.R.S. Govt. College**

**Academic session- 2024-25**

**Semester: Odd**

**Name of Teacher:Dr.Shelly Dalal**

**Class:B.Sc. 1<sup>st</sup> DSC**

**Section-A**

Week	
1 <sup>st</sup> Week (22-27July)	General characters of protozoans Classification ,Biodiversity, <i>Plasmodium</i> introduction:
28Sunday	
2 <sup>nd</sup> Week (29July-3August)	Lifecycle of <i>Plasmodium</i> , distribution and economic importance , Life history of <i>Entamoeba</i>
04Sunday	
3 <sup>rd</sup> Week(05- 10Aug)	<i>Entamoeba</i> :Mode of infection ,Pathogenecity, Life history of <i>Trypanosoma</i> ,
11AugSunday	
4 <sup>th</sup> Week (12- 17Aug)	Mode of infection and pathogenicity, General characters and classification of Porifera
15Aug,18Aug Sunday	
5 <sup>th</sup> Week (19- 24Aug)	Canal system in sponges, Spicules in sponges General characters and classification up to order level
25AugSunday	
6 <sup>th</sup> Week (26- 31Aug)	Test and assignment
1SeptSunday	
7 <sup>th</sup> Week (02- 07Sept)	Corals and coral reefs, General characters of Helminthes,Classification of Helminthes, <i>Fasciola hepatica</i> general character
08Sept Sunday	
8 <sup>th</sup> Week (09- 14Sept)	polymprphism in siphonophores, Type study <i>Fasciola</i> <i>hepatica</i> , Helminthes parasite: <i>Ancylostoma</i>
15Sept Sunday	
9 <sup>th</sup> Week (16- 21Sept)	Helminthes parasite: <i>Wuchereria</i> , General characters of Phylum Annelida, Classification of Phylum Annelida
22Sept Sunday	
10 <sup>th</sup> Week(23- 28Sept)	Metamerism in Annelids,General characters of Arthropoda
29SeptSunday	
11 <sup>th</sup> Week (30Sept-05Oct)	Classification of Phylum Arthropoda,General Characters of Cockroach
02Oct 06OctSunday	

12 <sup>th</sup> Week(07-12Oct)	Type study of Cockroach,General Characters of Phylum Mollusca,Torsion and detorsion in gastropods
13OctSunday	
13 <sup>th</sup> Week(14-19Oct)	Classification of Phylum Mollusca,Torsion and detorsion in gastropoda,General Characters of Phylum Echinodermata
20OctSunday	
14 <sup>th</sup> Week(21-26Oct)	Classification of Phylum Echinodermata,Sea Star general characters,Type study Asterias
27Oct-03Nov	DIWALI HOLIDAYS
16 <sup>th</sup> Week(04-09Nov)	Test and assignments
10 NovSunday	
17 <sup>th</sup> Week(11-16Nov)	Water vascular system in Echinodermates,General,characters of Phylum Hemichordata
17 NovSunday	
18 <sup>th</sup> Week(18-22Nov)	REVISION
23Nov-20Dec	University exam

**LESSON PLAN**  
**Session: 2024-25 odd sem**

**Name of teacher-** Dr. Devender

**Class-** : B.Sc II (semester-3 ) Sec A

**Subject-** :: ZOOLOGY

CLASS	WEEKS	SYLLABUS
B.Sc II (semester-3 ) Sec A	22-7-2024 to 27-7-2024	<b>Muscles ; Assignment:</b> 1. Type of muscles 1.Ultrastructure of skeletal muscle 2.muscle contraction
	29-7-2024 to 3-8-2024	1. tetanus, muscle twitch, muscle fatigue 2.corri cycle 3.smooth muscle properties
	5-8-2024 To 10-8-24	<b>Bones;</b> 1. structure and types and classification of bones 2.bone growth
	12-8-2024 to 17-8-2024	<b>Bones ;</b> 1.bone disorders 2.ageing effect on skeletal system
	20-8-2024 t 24-8-2024	<b>Chordates ; Assignment:</b> 1. Classification of chordates 2. Digestive system of Herdmania 3.classification, origin, evolution of chordates 4.biodiversity of chordates 5.economic importance of chordates
	27-8-2024 to 31-8-2024	<b>Protochordates :</b> systematic position, distribution, ecology, morphology and affinities 2.type study –Herdmania 3. type study- Amphioxus
	2-9-2024 to 7-9-2024	<b>Cyclostomes ; Topics to be covered:</b> 1. Character, classification up to orders 2. examples emphasizing biodiversity 3. type study- petromyzon
	9-9-2024 to 14-9-2024	<b>Pisces; Assignment:</b> scales and fins of fishes 1. general characters, classification of all phyla up to orders 2. Examples emphasizing their biodiversity
	16-9-2024 to 21-9-2024	<b>Topics to be covered:</b>

	Economic importance and conservation measures when required
23-9-2024 to 28-9-2024	<b>Topics to be covered:</b> Economic importance and conservation measures when required
<del>20-9-2024 to 26-9-2024</del>	<del><b>Assignments:</b> Digestive system of <i>labeo rohita</i></del>
	<b>Pisces ;</b> Scales and fins of fishes
7-10-2024 to 12-10-2024	<b>Pisces</b> 1. Parental care in fishes 2. Fish migration
14-10-2024 to 19-10-2024	<b>Pisces</b> <b>Assignments:</b> Parental care in fishes Topics to be covered: <i>labeo rohita</i> type study
21-10-2024 to 26-10-2024	<b>chordates in general</b> General characters of all phylum (comparative)
4-11-2024 to 9-11-2024	<b>bones</b> Topics to be covered: Resorption in bones and revision of bone disorders
11-11-2024 to 20-11-2024	revision of chordates and test 1 Revision of mammalian physiology and test 2
23-11-2024 to 20-12-2024	<b>MDU examination</b>
21-12-2024 to 31-12-2024	<b>Winter break</b>

**LESSON PLAN**  
**Session: 2024-25**

**Name of teacher-** Dr.Hariom

**Class-** : B.Sc II (semester-3 )

**Subject-** : : Zoology

CLASS	WEEKS	SYLLABUS
B.Sc II (semester-3) Sec.B	22-7-2024 to 27-7-2024	<b>Muscles ; Assignments:</b> 1. Type of muscles 1.Ultrastructure of skeletal muscle 2.muscle contraction
	29-7-2024 to 3-8-2024	1. tetanus, muscle twitch, muscle fatigue 2.corii cycle 3.smooth muscle properties
	5-8-2024 10-8-2024	<b>Bones;</b> 1. structure and types and classification of bones 2.bone growth
	12-8-2024 to 17-8-2024	<b>Bones ;</b> 1.bone disorders 2.ageing effect on skeletal system
	20-8-2024 t 24-8-2024	<b>Chordates ; Assignments:</b> 1. Classification of chordates 2. Digestive system of Herdmania 3.classification, origin, evolution of chordates 4.biodiversity of chordates 5.economic importance of chordates
	27-8-2024 to 31-8-2024	<b>Protochordates ;</b> 1 systematic position, distribution, ecology, morphology and affinities 2.type study –Herdmania 3. type study- Amphioxus
	2-9-2024 to 7-9-2024	<b>Cyclostomes ; Topics to be covered:</b> 1. Character, classification up to orders 2. examples emphasizing biodiversity 3. type study- petromyzon
	9-9-2024 to 14-9-2024	<b>Pisces; Assignment:</b> scales and fins of fishes 1. general characters, classification of all phyla upto orders 2. Examples emphasizing their biodiversity

16-9-2024 to 21-9-2024	<b>Topics to be covered:</b> Economic importance and conservation measures when required
23-9-2024 to 28-9-2024	<b>Topics to be covered:</b> Economic importance and conservation measures when required
<b>Assignment 5- digestive system of labeo rohita</b>	
10-2024	<b>Pisces ;</b> Scales and fins of fishes
7-10-2024 to 12-10-2024	<b>Pisces</b> 1.Parental care in fishes 2.Fish migration
14-10-2024 to 19-10-2024	<b>Pisces</b> <b>Assignments:</b> Parental care in fishes Topics to be covered: labeo rohita type study
21-10-2024 to 26-10-2024	<b>chordates in general</b> General characters of all phylum (comparative)
4-11-2024 to 9- 11-2024	<b>bones</b> Topics to be covered: Resorption in bones and revision of bone disorders
11-11-2024 to 20-11-2024	revision of chordates and test 1 Revision of mammalian physiology and test 2
23-11-2024 to 20-12-2024	<b>MDU examination</b>
21-12-2024 to 31-12-2024	<b>Winter break</b>

## Lesson Plan

**Name of College:** Pt. N.R.S. Government College, Rohtak

**Academic Session:** 2024-25

**Semester:** Odd

**Name of Ass.Prof:** Neeraj

**Class:** B.Sc. 1<sup>st</sup> chem. Hons.

**Name of Subject:** zoology MDC

22 <sup>nd</sup> -27 <sup>th</sup> July	Zoology: Definition and scope, introduction to Animal Kingdom
28 <sup>th</sup> July	<b>SUNDAY</b>
29 <sup>th</sup> -03 <sup>rd</sup> August	Animal characters Non-Chordates and Invertebrates with examples, Invertebrate Phyla, Introduction to basic characters of animal with special reference to the non chordates
04 <sup>th</sup> August	<b>SUNDAY</b>
5 <sup>th</sup> -10 <sup>th</sup> August	Biodiversity: Introduction and Scope; General characters of Protozoa And Porifera
11 <sup>th</sup> August	<b>SUNDAY</b>
12 <sup>th</sup> -17 <sup>th</sup> August	General characters of Coelentrata and Annelida; Ecological importance of corals;
18 <sup>th</sup> August	<b>SUNDAY</b>
19 <sup>th</sup> -24 <sup>th</sup> August	Morphology of earthworm and Its ecological role; Economic importance of Leech
25 <sup>th</sup> August	<b>SUNDAY</b>
26 <sup>th</sup> -31 <sup>st</sup> August	General characters of Arthropoda; Study of basic characters of insects and snails; Insects as pest:
1 <sup>st</sup> September	<b>SUNDAY</b>
2 <sup>nd</sup> -7 <sup>th</sup> September	Grasshopper, Economic importance of Honey Bee
08 <sup>th</sup> September	<b>SUNDAY</b>
9 <sup>th</sup> -14 <sup>th</sup> September	General characters of Echinodermata
15 <sup>th</sup> September	<b>SUNDAY</b>
16 <sup>th</sup> -21 <sup>st</sup> September	Revision, Assignment, Test
22 <sup>nd</sup> September	<b>SUNDAY</b>
23 <sup>th</sup> -28 <sup>th</sup> September	; Study of basic characters of Starfish with reference to its role in ecosystem
29 <sup>th</sup> September	<b>SUNDAY</b>
30 <sup>th</sup> Sep-05 <sup>th</sup> October	\Revision, Assignment, Test
06 <sup>th</sup> October	<b>SUNDAY</b>
07 <sup>th</sup> -12 <sup>th</sup> October	Economic importance of StarFish
13 <sup>th</sup> October	<b>SUNDAY</b>
14 <sup>th</sup> -19 <sup>th</sup> October	General characters of Mollusca
20 <sup>th</sup> October	<b>SUNDAY</b>

<b>21<sup>st</sup>-26<sup>th</sup>October</b>	Study of Amoeba and sponges with special reference to its structure and economic importance
<b>27<sup>th</sup>October</b>	<b>SUNDAY</b>
<b>4<sup>th</sup>-9<sup>th</sup>November</b>	.Snails as pest in Paddy fields
<b>10<sup>th</sup>November</b>	<b>SUNDAY</b>
<b>11<sup>th</sup>-16<sup>th</sup>November</b>	Revision,Assignment,Test
<b>17<sup>th</sup>November</b>	<b>SUNDAY</b>
<b>18<sup>th</sup> November onwards till Exams.</b>	Revision,Assignment,Test

### Summary of Lesson Plan of College Faculty

Name of College: Pt. N.R.S. Government College, Rohtak

AcademicSession:2024-25

Semester: Odd

Name of Asstt./Ass. Prof: Ravina

Class: B.Sc. 1<sup>st</sup>

Name of Subject: zoology SEC

<b>22<sup>nd</sup>-27<sup>th</sup> July</b>	Origins o Apiculture meaning, definition scope and history Status of Apiculture Industry in India
<b>28<sup>th</sup> July</b>	<b>SUNDAY</b>
<b>29<sup>th</sup>-03<sup>rd</sup> August</b>	Classification and Life Cycle of Honey Bee. Identification of Indigenous and exotic Honey bee species
<b>04<sup>th</sup> August</b>	<b>SUNDAY</b>
<b>5<sup>th</sup>-10<sup>th</sup> August</b>	Cultivable species of Honey Bee with reference to India Social organization of honey bees: the castes- queen, drone and workers,
<b>11<sup>th</sup> August</b>	<b>SUNDAY</b>
<b>12<sup>th</sup>-17<sup>th</sup> August</b>	Nesting behavior of Honey bees, Bee foraging, Seasonal management, swarming in Honey bees, waggle dance, defense in honey bees
<b>18<sup>th</sup> August</b>	<b>SUNDAY</b>
<b>19<sup>th</sup>-24<sup>th</sup> August</b>	Diseases and Enemies. of Bees ,Control and Preventive measures.
<b>25<sup>th</sup> August</b>	<b>SUNDAY</b>
<b>26<sup>th</sup>-31<sup>st</sup> August</b>	Role of Bees in cross pollination in horticulture and agriculture
<b>1<sup>st</sup> September</b>	<b>SUNDAY</b>
<b>2<sup>nd</sup> -7<sup>th</sup> September</b>	Equipments used in Bee keeping Industry
<b>08<sup>th</sup> September</b>	<b>SUNDAY</b>
<b>9<sup>th</sup>-14<sup>th</sup> September</b>	Products of Apiculture Industry and their Uses (Honey, Bee Wax, Royal Jelly,
<b>15<sup>th</sup> September</b>	<b>SUNDAY</b>
<b>16<sup>th</sup>-21<sup>st</sup> September</b>	Bee Venom, Propolis and Pollen)
<b>22<sup>nd</sup> September</b>	<b>SUNDAY</b>
<b>23<sup>th</sup>-28<sup>th</sup> September</b>	Bee Keeping Industry: Present and future
<b>29<sup>th</sup> September</b>	<b>SUNDAY</b>
<b>30<sup>th</sup> Sep -05<sup>th</sup> October</b>	\ Revision, Assignment, Test
<b>06<sup>th</sup> October</b>	<b>SUNDAY</b>
<b>07<sup>th</sup>-12<sup>th</sup> October</b>	Prospects of apiculture as self employment venture
<b>13<sup>th</sup> October</b>	<b>SUNDAY</b>
<b>14<sup>th</sup>-19<sup>th</sup> October</b>	Economics of Apiculture: Expenditure, Net Income, and Additional benefits
<b>20<sup>th</sup> October</b>	<b>SUNDAY</b>
<b>21<sup>st</sup>-26<sup>th</sup> October</b>	Social organization of honey bees: the castes- queen, drone and workers

<b>27<sup>th</sup> October</b>	<b>SUNDAY</b>
<b>4<sup>th</sup> –9<sup>th</sup> November</b>	Methods of extraction of Honey and other products
<b>10<sup>th</sup> November</b>	<b>SUNDAY</b>
<b>11<sup>th</sup> -16<sup>th</sup> November</b>	Revision, Assignment, Test
<b>17<sup>th</sup> November</b>	<b>SUNDAY</b>
<b>18<sup>th</sup> November onwards till Exams.</b>	Revision, Assignment, Test

### Summary of Lesson Plan of College Faculty

Name of College: Pt. N.R.S. Government College, Rohtak

AcademicSession:2024-25

Semester: Odd

Name of Asstt./Ass. Prof: Dr.Amit Dev

Class: B.Sc. 1<sup>st</sup>

Name of Subject: zoology SEC

<b>22<sup>nd</sup>-27<sup>th</sup> July</b>	Origins of Apiculture meaning, definition scope and history Status of Apiculture Industry in India
<b>28<sup>th</sup> July</b>	<b>SUNDAY</b>
<b>29<sup>th</sup>-03<sup>rd</sup> August</b>	Classification and Life Cycle of Honey Bee. Identification of Indigenous and exotic Honey bee species
<b>04<sup>th</sup> August</b>	<b>SUNDAY</b>
<b>5<sup>th</sup>-10<sup>th</sup> August</b>	Cultivable species of Honey Bee with reference to India Social organization of honey bees: the castes- queen, drone and workers,
<b>11<sup>th</sup> August</b>	<b>SUNDAY</b>
<b>12<sup>th</sup>-17<sup>th</sup> August</b>	Nesting behavior of Honey bees, Bee foraging, Seasonal management, swarming in Honey bees, waggle dance, defense in honey bees
<b>18<sup>th</sup> August</b>	<b>SUNDAY</b>
<b>19<sup>th</sup>-24<sup>th</sup> August</b>	Diseases and Enemies. of Bees ,Control and Preventive measures.
<b>25<sup>th</sup> August</b>	<b>SUNDAY</b>
<b>26<sup>th</sup>-31<sup>st</sup> August</b>	Role of Bees in cross pollination in horticulture and agriculture
<b>1<sup>st</sup> September</b>	<b>SUNDAY</b>
<b>2<sup>nd</sup> -7<sup>th</sup> September</b>	Equipments used in Bee keeping Industry
<b>08<sup>th</sup> September</b>	<b>SUNDAY</b>
<b>9<sup>th</sup>-14<sup>th</sup> September</b>	Products of Apiculture Industry and their Uses (Honey, Bee Wax, Royal Jelly,
<b>15<sup>th</sup> September</b>	<b>SUNDAY</b>
<b>16<sup>th</sup>-21<sup>st</sup> September</b>	Bee Venom, Propolis and Pollen)
<b>22<sup>nd</sup> September</b>	<b>SUNDAY</b>
<b>23<sup>th</sup>-28<sup>th</sup> September</b>	Bee Keeping Industry: Present and future
<b>29<sup>th</sup> September</b>	<b>SUNDAY</b>
<b>30<sup>th</sup> Sep -05<sup>th</sup> October</b>	\ Revision, Assignment, Test
<b>06<sup>th</sup> October</b>	<b>SUNDAY</b>
<b>07<sup>th</sup>-12<sup>th</sup> October</b>	Prospects of apiculture as self employment venture
<b>13<sup>th</sup> October</b>	<b>SUNDAY</b>
<b>14<sup>th</sup>-19<sup>th</sup> October</b>	Economics of Apiculture: Expenditure, Net Income, and Additional benefits
<b>20<sup>th</sup> October</b>	<b>SUNDAY</b>
<b>21<sup>st</sup>-26<sup>th</sup> October</b>	Social organization of honey bees: the castes- queen, drone and workers

<b>27<sup>th</sup> October</b>	<b>SUNDAY</b>
<b>4<sup>th</sup> –9<sup>th</sup> November</b>	Methods of extraction of Honey and other products
<b>10<sup>th</sup> November</b>	<b>SUNDAY</b>
<b>11<sup>th</sup> -16<sup>th</sup> November</b>	Revision, Assignment, Test
<b>17<sup>th</sup> November</b>	<b>SUNDAY</b>
<b>18<sup>th</sup> November onwards till Exams.</b>	Revision, Assignment, Test

**LESSON PLAN**  
**JULY 2024 to DECEMBER 2024**  
**Odd semester**

<b>Name of the Assistant Professor: Parveen Punia</b>
<b>Class and Section: B.Sc II (semester-3 ) Section A and B</b>
<b>Subject: Zoology</b>
<b>Paper: 1. Mammalian physiology-I</b>
<b>JULY</b>
<b>Week 4</b>
<b>Chapter: Lipids</b>
<b>Assignments: <i>Lipids Structure</i></b>
<b>Topics to be covered: Introduction on Lipids, Classification of Lipids, general properties of Lipids</b>
<b>Week 5</b>
<b>Chapter: Carbohydrates</b>
<b>Topics to be covered: Introduction on Carbohydrates, Classification of carbohydrates,</b>
<b>AUGUST</b>
<b>Week 1</b>
<b>Chapter: carbohydrates</b>
<b>Topics to be covered:</b> <b>General properties of carbohydrates</b>
<b>Week 2</b>
<b>Chapter: Introduction, structure and classification of protein</b>
<b>Topics to be covered:</b> <b>General properties of Proteins</b>
<b>Week 3</b>
<b>Chapter - Enzymes</b>
<b>Assignments: 1. Classification of proteins</b> <b>2. Enzymes</b>
<b>Topics to be covered:</b> <b>Classification of enzymes</b>
<b>Week 4</b>
<b>Chapter: Enzymes</b>
<b>Topics to be covered:</b> <b>Mechanisms of enzyme action</b>

**LESSON PLAN**  
**JULY 2024 to DECEMBER 2024**  
**Odd semester**

<b>Week 5</b>			
<b>Chapter: Transport through Biomembranes</b>			
<b>Topics to be covered: Active transport</b>			
<b>SEPTEMBER</b>			
<b>Week 1</b>			
<b>Chapter: Transport through Biomembranes</b>			
<b>Assignment: Transport of Biomolecules</b>			
<b>Topics to be covered: Passive transport</b>			
<b>Week 2</b>			
<b>Chapter: Buffers</b>			
<b>Topics to be covered:</b> Buffers			
<b>Week 3</b>			
<b>Chapter: Nutrition</b>			
<b>Assignments: Vitamins</b>			
<b>Topics to be covered: Nutritional Components</b>			
<b>Week 4</b>			
<b>Chapter: nutrition</b>			
<b>Topics to be covered: Types of nutrition and Feeding</b>			
<b>October</b>			
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border-bottom: 1px solid black;"><b>Week 1:</b> <b>Chapter: Nutrition</b></td> </tr> <tr> <td><b>Assignments:</b> Digestion of dietary constituents - Lipids and Proteins</td> </tr> <tr> <td style="text-align: center; padding-top: 10px;">1. Topics to be covered: Digestion of dietary constituents - Lipids and Proteins</td> </tr> </table>	<b>Week 1:</b> <b>Chapter: Nutrition</b>	<b>Assignments:</b> Digestion of dietary constituents - Lipids and Proteins	1. Topics to be covered: Digestion of dietary constituents - Lipids and Proteins
<b>Week 1:</b> <b>Chapter: Nutrition</b>			
<b>Assignments:</b> Digestion of dietary constituents - Lipids and Proteins			
1. Topics to be covered: Digestion of dietary constituents - Lipids and Proteins			
<table style="width: 100%; border-collapse: collapse;"> <tr> <td><b>Week 2</b></td> </tr> <tr> <td><b>Chapter: Nutrition</b></td> </tr> <tr> <td><b>Topics to be covered:</b> Symbiotic Digestion</td> </tr> </table>	<b>Week 2</b>	<b>Chapter: Nutrition</b>	<b>Topics to be covered:</b> Symbiotic Digestion
<b>Week 2</b>			
<b>Chapter: Nutrition</b>			
<b>Topics to be covered:</b> Symbiotic Digestion			

**LESSON PLAN**  
**JULY 2024 to DECEMBER 2024**  
**Odd semester**

**Week 3**  
**Chapter: Nutrition**

Topics to be covered: Absorption of Nutrients

**Diwali vacations**

**November**  
**Week 2**

**Chapter: Nutrition**

**Topics to be covered: Assimilation of Nutrients and Control of enzyme secretion**

**Week 3**  
Revision of mammalian physiology

### Summary of Lesson Plan of College Faculty

Name of College: Pt. N.R.S. Government College, Rohtak

AcademicSession:2024-25

Semester: Odd SEC A&B

Name of Asstt./Ass. Prof: Surender Narwal

Class: B.Sc. 5<sup>TH</sup> SEM

Name of Subject: zoology

22 <sup>nd</sup> -27 <sup>th</sup> July	Introduction to world fisheries:
28 <sup>th</sup> July	<b>SUNDAY</b>
29 <sup>th</sup> -03 <sup>rd</sup> August	Production, utilisation and demand
04 <sup>th</sup> August	<b>SUNDAY</b>
5 <sup>th</sup> -10 <sup>th</sup> August	Fresh water fishes of India
11 <sup>th</sup> August	<b>SUNDAY</b>
12 <sup>th</sup> -17 <sup>th</sup> August	River System
18 <sup>th</sup> August	<b>SUNDAY</b>
19 <sup>th</sup> -24 <sup>th</sup> August	Reservoir, Pond, Tank fisheries,
25 <sup>th</sup> August	<b>SUNDAY</b>
26 <sup>th</sup> -31 <sup>st</sup> August	Captive and Culture Fisheries
1 <sup>st</sup> September	<b>SUNDAY</b>
2 <sup>nd</sup> -7 <sup>th</sup> September	Cold water fisheries
08 <sup>th</sup> September	<b>SUNDAY</b>
9 <sup>th</sup> -14 <sup>th</sup> September	Fishing Craft Fishing Gears
15 <sup>th</sup> September	<b>SUNDAY</b>
16 <sup>th</sup> -21 <sup>st</sup> September	Revision, Assignment, Test
22 <sup>nd</sup> September	<b>SUNDAY</b>
23 <sup>th</sup> -28 <sup>th</sup> September	Fin fishes, Crustaceans, Molluscs and their culture
29 <sup>th</sup> September	<b>SUNDAY</b>
30 <sup>th</sup> Sep -05 <sup>th</sup> October	Fish Seed Production: Natural seed resources, its assessment, collection, Hatchery Production
06 <sup>th</sup> October	<b>SUNDAY</b>
07 <sup>th</sup> -12 <sup>th</sup> October	Nutrition: Source of Food ( Natural and Artificial ) fish feed composition ( Calories and Chemical ingredients )
13 <sup>th</sup> October	<b>SUNDAY</b>
14 <sup>th</sup> -19 <sup>th</sup> October	Field culture: Ponds - Running water, Recycled Water, cage culture

<b>20<sup>th</sup> October</b>	<b>SUNDAY</b>
<b>21<sup>st</sup>-26<sup>th</sup> October</b>	; Poly culture
<b>27<sup>th</sup> October</b>	<b>SUNDAY</b>
<b>4<sup>th</sup>-9<sup>th</sup> November</b>	Culture Technology: Biotechnology, Gene manipulation and cryopreservation of Gamets
<b>10<sup>th</sup> November</b>	<b>SUNDAY</b>
<b>11<sup>th</sup>-16<sup>th</sup> November</b>	Revision, Assignment, Test
<b>17<sup>th</sup> November</b>	<b>SUNDAY</b>
<b>18<sup>th</sup> November onwards till Exams.</b>	Revision, Assignment, Test

**Summary of Lesson Plan of College Faculty**

Name of College: Pt. N.R.S. Government College, Rohtak

Academic Session: 2024-25

Semester: Odd

SEC: A

Name of Asstt./Ass.Prof: Sunita Birwal

Class: B.Sc. 5<sup>TH</sup> SEM

Name of Subject: zoology

22 <sup>nd</sup> -27 <sup>th</sup> July	Ecology: Basic concepts of Ecology, Definition, significance. concept of Habitat and ecological Niche
28 <sup>th</sup> July	<b>SUNDAY</b>
29 <sup>th</sup> -03 <sup>rd</sup> August	Factors Affecting Environment: Abiotic Factors, Light, Temperature
04 <sup>th</sup> August	<b>SUNDAY</b>
5 <sup>th</sup> -10 <sup>th</sup> August	Factors Affecting Environment: Humidity, Topography, Edaphic factor and Biotic factors
11 <sup>th</sup> August	<b>SUNDAY</b>
12 <sup>th</sup> -17 <sup>th</sup> August	Ecosystem: Concept, components, properties and Functions
18 <sup>th</sup> August	<b>SUNDAY</b>
19 <sup>th</sup> -24 <sup>th</sup> August	Exoecological energetic and energy flow food chain and food web Trophic structure, Exo ecological Pyramids
25 <sup>th</sup> August	<b>SUNDAY</b>
26 <sup>th</sup> -31 <sup>st</sup> August	Concept of Productivity Biogeochemical cycle
1 <sup>st</sup> September	<b>SUNDAY</b>
2 <sup>nd</sup> -7 <sup>th</sup> September	Reservoir pool, Gaseous cycle and sedimentary cycle Population Growth Curve
08 <sup>th</sup> September	<b>SUNDAY</b>
9 <sup>th</sup> -14 <sup>th</sup> September	Origin of Life: Concept and Evidences of evolution
15 <sup>th</sup> September	<b>SUNDAY</b>
16 <sup>th</sup> -21 <sup>st</sup> September	Theories of Organic Evolution
22 <sup>nd</sup> September	<b>SUNDAY</b>
23 <sup>th</sup> -28 <sup>th</sup> September	Concept of Microevolution
29 <sup>th</sup> September	<b>SUNDAY</b>
30 <sup>th</sup> Sep-05 <sup>th</sup> October	Concept of macroevolution
06 <sup>th</sup> October	<b>SUNDAY</b>
07 <sup>th</sup> -12 <sup>th</sup> October	concept of Mega evolution
13 <sup>th</sup> October	<b>SUNDAY</b>

<b>14<sup>th</sup>-19<sup>th</sup>October</b>	Concept of Species
<b>20<sup>th</sup>October</b>	<b>SUNDAY</b>
<b>21<sup>st</sup>-26<sup>th</sup>October</b>	Phylogeny of Horse
<b>27<sup>th</sup>October</b>	<b>SUNDAY</b>
<b>4<sup>th</sup>-9<sup>th</sup>November</b>	Evolution of Man
<b>10<sup>th</sup>November</b>	<b>SUNDAY</b>
<b>11<sup>th</sup>-16<sup>th</sup>November</b>	Revision,Assignment,Test
<b>17<sup>th</sup>November</b>	<b>SUNDAY</b>
<b>18<sup>th</sup>November Onwards til IExams.</b>	Revision,Assignment,Test

### Summary of Lesson Plan of College Faculty

Name of College: Pt. N.R.S. Government College, Rohtak

AcademicSession:2024-25

Semester: Odd SEC B

Name of Teacher Tilak raj Class: B.Sc. 5<sup>TH</sup>

SEM

Name of Subject: zoology

22 <sup>nd</sup> -27 <sup>th</sup> July	Ecology: Basic concepts of Ecology, Definition, significance. concept of Habitat and ecological Niche
28 <sup>th</sup> July	<b>SUNDAY</b>
29 <sup>th</sup> -03 <sup>rd</sup> August	Factors Affecting Environment: Abiotic Factors, Light, Temperature
04 <sup>th</sup> August	<b>SUNDAY</b>
5 <sup>th</sup> -10 <sup>th</sup> August	Factors Affecting Environment: Humidity, Topography, Edaphic factor and Biotic factors
11 <sup>th</sup> August	<b>SUNDAY</b>
12 <sup>th</sup> -17 <sup>th</sup> August	Ecosystem: Concept, components, properties and Functions
18 <sup>th</sup> August	<b>SUNDAY</b>
19 <sup>th</sup> -24 <sup>th</sup> August	Exo ecological energetic and energy flow food chain and food web Trophic structure, Exo ecological Pyramids
25 <sup>th</sup> August	<b>SUNDAY</b>
26 <sup>th</sup> -31 <sup>st</sup> August	Concept of Productivity Biogeochemical cycle
1 <sup>st</sup> September	<b>SUNDAY</b>
2 <sup>nd</sup> -7 <sup>th</sup> September	reservoir pool, Gaseous cycle and sedimentary cycle Population Growth Curve
08 <sup>th</sup> September	<b>SUNDAY</b>
9 <sup>th</sup> -14 <sup>th</sup> September	Origin of Life: Concept and Evidences of evolution
15 <sup>th</sup> September	<b>SUNDAY</b>
16 <sup>th</sup> -21 <sup>st</sup> September	Theories of Organic Evolution
22 <sup>nd</sup> September	<b>SUNDAY</b>
23 <sup>th</sup> -28 <sup>th</sup> September	Concept of Micro evolution
29 <sup>th</sup> September	<b>SUNDAY</b>
30 <sup>th</sup> Sep -05 <sup>th</sup> October	concept of macro evolution
06 <sup>th</sup> October	<b>SUNDAY</b>
07 <sup>th</sup> -12 <sup>th</sup> October	concept of Mega evolution
13 <sup>th</sup> October	<b>SUNDAY</b>

<b>14<sup>th</sup>-19<sup>th</sup> October</b>	Concept of Species
<b>20<sup>th</sup> October</b>	<b>SUNDAY</b>
<b>21<sup>st</sup>-26<sup>th</sup> October</b>	Phylogeny of Horse
<b>27<sup>th</sup> October</b>	<b>SUNDAY</b>
<b>4<sup>th</sup> -9<sup>th</sup> November</b>	Evolution of Man
<b>10<sup>th</sup> November</b>	<b>SUNDAY</b>
<b>11<sup>th</sup> -16<sup>th</sup> November</b>	Revision, Assignment, Test
<b>17<sup>th</sup> November</b>	<b>SUNDAY</b>
<b>18<sup>th</sup> November onwards till Exams.</b>	Revision, Assignment, Test