LESSON PLAN FOR EVEN SEM
SESSION 2017-18

NAME OF ASSISTANT /ASSOCIATE PROFESSOR: DR. NEETU GARG
CLASS/SECTION : B.SC I
SUBJECT: ZOOLOGY (THEORY + PRACTICAL)

UNIT/PART I	**TOPIC**	
	THEORY	**PRACTICAL**
DAY1 DATE 1-1-18	Introduction to phylum Annelida and characteristics of phylum Annelida	Group A: *Peripatus*, *Palaemon* (Prawn), *Lobster*, *Cancer* (crab), *Sacculina*, *Eupagurus* (hermit crab), *Lepas*
DAY2 DATE 2-1-18	Peculiar features of phylum Annelida and some examples of phylum Annelida	Group A: *Balanus*, *Cyclops*, *Daphnia*, *Lepisma*, *Periplaneta* (cockroach), *Schistocerca* (locust), *Poecilocerus* (ak-hopper), *Gryllus* (cricket), *Mantis* (praying mantis), *Cicada*, *Forficula* (earwig), Dragon fly
DAY3 DATE 3-1-18	Biodiversity in Annelids	Group B: *Peripatus*, *Palaemon* (Prawn), *Lobster*, *Cancer* (crab), *Sacculina*, *Eupagurus* (hermit crab), *Lepas*
DAY4 DATE 4-1-18	-	Group B: *Balanus*, *Cyclops*, *Daphnia*, *Lepisma*, *Periplaneta* (cockroach), *Schistocerca* (locust), *Poecilocerus* (ak-hopper), *Gryllus* (cricket), *Mantis* (praying mantis), *Cicada*, *Forficula* (earwig), Dragon fly
DAY5 DATE 5-1-18	-	Group C: *Peripatus*, *Palaemon* (Prawn), *Lobster*, *Cancer* (crab), *Sacculina*, *Eupagurus* (hermit crab), *Lepas*
DAY6 DATE 6-1-18	-	Group C: *Balanus*, *Cyclops*, *Daphnia*, *Lepisma*, *Periplaneta* (cockroach), *Schistocerca* (locust), *Poecilocerus* (ak-hopper), *Gryllus* (cricket), *Mantis* (praying mantis), *Cicada*, *Forficula* (earwig), Dragon fly
DAY7 DATE 8-1-18	General characteristics of Earthworm and circulatory system of Earthworms	Group A: Termite queen, bug, moth, beetle, *Polistes* (wasp), *Apis* (honey bee), *Bombyx* (silk moth),

		Cimex (beg bug)
DAY8 DATE 9-1-18	Respiratory and excretory system of Earthworms	Group A: *Pediculus* (body louse), Millipedes, *Scolopendra* (centipedes), *Palamnaeus* (scorpion), *Aranea* (spider), *Limulus* (king crab)
DAY9 DATE 10-1-18	Nervous system and sense Organs of Earthworms	Group B: Termite queen, bug, moth, beetle, *Polistes* (wasp), *Apis* (honey bee), *Bombyx* (silk moth), *Cimex* (beg bug)
DAY10 DATE 11-1-18	-	Group B: *Pediculus* (body louse), Millipedes, *Scolopendra* (centipedes), *Palamnaeus* (scorpion), *Aranea* (spider), *Limulus* (king crab)
DAY11 DATE 12-1-18	-	Group C: Termite queen, bug, moth, beetle, *Polistes* (wasp), *Apis* (honey bee), *Bombyx* (silk moth), *Cimex* (beg bug)
DAY12 DATE 13-1-18	-	Group C: *Pediculus* (body louse), Millipedes, *Scolopendra* (centipedes), *Palamnaeus* (scorpion), *Aranea* (spider), *Limulus* (king crab)
DAY13 DATE 15-1-18	Male reproductive system of Earthworms	Group A: Study of the following permanent stained preparation of trachea and mouthparts of cockroach
DAY 14 DATE 16-1-18	Female reproductive system of Earthworms	Group A: *Mytilus*, *Ostrea*, *Cardium*, *Pholas, Solen* (razor fish)
DAY15 DATE 17-1-18	Economic importance of earthworms	Group B: Study of the following permanent stained preparation of trachea and mouthparts of cockroach
DAY16 DATE 18-1-18	-	Group B: *Mytilus*, *Ostrea*, *Cardium*, *Pholas, Solen* (razor fish)
DAY17 DATE 19-1-18	-	Group C: Study of the following permanent stained preparation of trachea and mouthparts of cockroach
DAY18 DATE 20-1-18	-	Group C: *Mytilus*, *Ostrea*, *Cardium*, *Pholas, Solen* (razor fish)
DAY19 DATE 22-1-18	**HOLIDAY**	**HOLIDAY**
DAY20 DATE 23-1-18	**SPORTS DAY**	**SPORTS DAY**

DAY21 DATE 24-1-18	**HOLIDAY**	**HOLIDAY**
DAY22 DATE 25-1-18	Metamerism in Annelida	Group B: File completion
DAY23 DATE 26-1-18	**HOLIDAY**	**HOLIDAY**
DAY 24 DATE 27-1-18	-	Group C: File completion
UNIT/PART II	**TOPIC**	
	THEORY	**PRACTICAL**
DAY1 DATE 29-1-18	Introduction and definition of phylum Arthropoda	Group A: File completion
DAY2 DATE 30-1-18	Classification of phylum Arthropoda	Group A: *Pecten*, *Holiotis*, *Patella*, *Aplysia*, *Doris*, *Limax*, *Loligo*, *Sepia*, *Octopus*, *Nautilus* (complete and T.S.), *Chiton* and *Dentalium*
DAY3 DATE 31-1-18	**HOLIDAY**	**HOLIDAY**
DAY4 DATE 1-2-18	-	Group B: *Pecten*, *Holiotis*, *Patella*, *Aplysia*, *Doris*, *Limax*, *Loligo*, *Sepia*, *Octopus*, *Nautilus* (complete and T.S.), *Chiton* and *Dentalium*
DAY5 DATE 2-2-18	-	Group C: *Pecten*, *Holiotis*, *Patella*, *Aplysia*, *Doris*, *Limax*, *Loligo*, *Sepia*, *Octopus*, *Nautilus* (complete and T.S.), *Chiton* and *Dentalium*
DAY6 DATE 3-2-18	-	Group C: File completion
DAY7 DATE 5-2-18	Biodiversity in Arthropoda	Group A: Study of the following permanent stained preparation of Statocyst of Palaemon, Glochidium larva of Anodonta; radula and osphradium of Pila
DAY8 DATE 6-2-18	Economic importance of Arthropoda	Group A: File completion
DAY9 DATE 7-2-18	Type study of Grasshopper	Group B: Study of the following permanent stained preparation of Statocyst of Palaemon, Glochidium larva of Anodonta; radula and osphradium of Pila
DAY10 DATE 8-2-18	-	Group B: File completion
DAY11 DATE 9-2-18	**ASSIGNMENT 1-** Metamerism in Annelida	Group C: Study of the following permanent stained preparation of Statocyst of Palaemon, Glochidium larva of Anodonta; radula and

		osphradium of Pila
DAY12 DATE 10-2-18	**HOLIDAY**	**HOLIDAY**
DAY13 DATE 12-2-18	Respiratory and Circulatory system of grasshopper	Group A: *Asterias, Echinus, Cucumara, Ophiothrix, Antedon* and *Asterophyton, Balanoglossus*
DAY14 DATE 13-2-18	**HOLIDAY**	**HOLIDAY**
DAY15 DATE 14-2-18	Excretory and Nervous system of grasshopper	Group B: *Asterias, Echinus, Cucumara, Ophiothrix, Antedon* and *Asterophyton, Balanoglossus*
DAY16 DATE 15-2-18	-	Group B: File completion
DAY17 DATE 16-2-18	-	Group C: *Asterias, Echinus, Cucumara, Ophiothrix, Antedon* and *Asterophyton, Balanoglossus*
DAY18 DATE 17-2-18	-	Group C: File completion
DAY19 DATE 19-2-18	Sense organs of grasshopper	Group A: Study of the following permanent stained preparations T.S. Star fish (arm), T.S. *Balanoglossus* (through various regions)
DAY20 DATE 20-2-18	Reproductive system of grasshopper	Group A: File completion
DAY21 DATE 21-2-18	Economic importance of grasshopper	Group B: Study of the following permanent stained preparations T.S. Star fish (arm), T.S. *Balanoglossus* (through various regions)
DAY22 DATE 22-2-18	-	Group B: File completion
DAY23 DATE 23-2-18	-	Group C: Study of the following permanent stained preparations T.S. Star fish (arm), T.S. *Balanoglossus* (through various regions)
UNIT/PART III	**TOPIC**	
	THEORY	**PRACTICAL**
DAY1 DATE 24-2-18	-	Group C: File completion
DAY2 DATE 26-2-18	Elements of Heredity and variation	Group A: Temporary preparation of Volvox
DAY3 DATE 27-2-18	Principles of heredity and variation	Group A: Temporary preparation of Volvox

DAY4 DATE 28-2-18	**HOLIDAY**	**HOLIDAY**
DAY5 DATE 1-3-18	**HOLIDAY**	**HOLIDAY**
DAY6 DATE 2-3-18	**HOLIDAY**	**HOLIDAY**
DAY7 DATE 3-3-18	**HOLIDAY**	**HOLIDAY**
DAY8 DATE 5-3-18	Practice questions for principles of heredity and variation	Group A: Temporary preparation of Paramecium
DAY9 DATE 6-3-18	Varieties of gene interactions	Group A: Temporary preparation of Paramecium
DAY10 DATE 7-3-18	Practice questions for varieties of gene interactions	Group B: Temporary preparation of Volvox
DAY11 DATE 8-3-18	-	Group B: Temporary preparation of Paramecium
DAY12 DATE 9-3-18	-	Group C: Temporary preparation of Volvox
DAY13 DATE 10-3-18	**ASSIGNMENT 2-** Economic importance of Insects	Group C: Temporary preparation of Paramecium
DAY 14 DATE 12-3-18	Linkage	Group A: Temporary preparation of Gemmules of Sycon
DAY15 DATE 13-3-18	Crossing over	Group A: Temporary preparation of spicules of Sycon
DAY16 DATE 14-3-18	Frequency of crossing over	Group B: Temporary preparation of Gemmules of Sycon
DAY17 DATE 15-3-18	-	Group B: Temporary preparation of spicules of Sycon
DAY18 DATE 16-3-18	-	Group C: Temporary preparation of Gemmules of Sycon
DAY19 DATE 17-3-18	-	Group C: Temporary preparation of spicules of Sycon
DAY20 DATE 19-3-18	Chromosomal mapping	Group A: Temporary preparation of mouth parts and trachea of *Periplanata*
DAY21 DATE 20-3-18	Practice questions for linkage and crossing over	Group A: Preparation of permanent stained whole mounts of *Hydra*
DAY22 DATE 21-3-18	**CONDITIONAL TEST**	Group B: Temporary preparation of mouth parts and trachea of *Periplanata*
DAY23 DATE 22-3-18	**CONDITIONAL TEST**	Group B: Preparation of permanent stained whole mounts of *Hydra*
DAY 24 DATE 23-3-18	**HOLIDAY**	**HOLIDAY**
DAY 25 DATE 24-3-18	-	Group C: Temporary preparation of mouth parts and trachea of

		Periplanata
UNIT/PART IV	**TOPIC**	
	THEORY	**PRACTICAL**
DAY1 DATE 26-3-18	Sex determination and its mechanism	Group A: Preparation of permanent stained whole mounts of *Obelia*
DAY2 DATE 27-3-18	Heterogametic males	Group A: Preparation of permanent stained whole mounts of Sertularia
DAY3 DATE 28-3-18	Practice questions for Heterogametic males	Group B: Preparation of permanent stained whole mounts of *Obelia, Sertularia*
DAY4 DATE 29-3-18	**HOLIDAY**	**HOLIDAY**
DAY5 DATE 30-3-18	-	Group C: Preparation of permanent stained whole mounts of *Hydra*
DAY6 DATE 31-3-18	-	Group C: Preparation of permanent stained whole mounts of *Obelia, Sertularia*
DAY7 DATE 2-4-18	Heterogametic females	Group A: Preparation of permanent stained whole mounts of *Plumularia*
DAY8 DATE 3-4-18	Practice questions for Heterogametic females	Group A: Preparation of permanent stained whole mounts of *Bougainvillea*
DAY9 DATE 4-4-18	Genic balance mechanism	Group B: Preparation of permanent stained whole mounts of *Plumularia*
DAY10 DATE 5-4-18	-	Group B: Preparation of permanent stained whole mounts of *Bougainvillea*
DAY11 DATE 6-4-18	-	Group C: Preparation of permanent stained whole mounts of *Plumularia*
DAY12 DATE 7-4-18	-	Group C: Preparation of permanent stained whole mounts of *Bougainvillea*
DAY13 DATE 9-4-18	Environmental determination of sex	Group A: Preparation of mouth parts of Mosquito, House fly and cockroach
DAY14 DATE 10-4-18	Sex linked inheritance	Group A: Preparation of mouth parts of Mosquito, House fly and cockroach
DAY15 DATE 11-4-18	Examples of x-linked inheritance	Group B: Preparation of mouth parts of Mosquito, House fly and cockroach
DAY16	-	Group B: Preparation of mouth

DATE 12-4-18		parts of Mosquito, House fly and cockroach
DAY17 DATE 13-4-18	-	Group C: Preparation of mouth parts of Mosquito, House fly and cockroach
DAY18 DATE 14-4-18	**HOLIDAY**	**HOLIDAY**
DAY19 DATE 16-4-18	Sex influenced genes	Group A: Computer, simulated study/ model of Earthworm: Digestive, reproductive and nervous systems
DAY20 DATE 17-4-18	Extra-chromosomal and cytoplasmic inheritance	Group A:
DAY21 DATE 18-4-18	**HOLIDAY**	**HOLIDAY**
DAY22 DATE 19-4-18	-	Group B: Computer, simulated study/ model of Earthworm: Digestive, reproductive and nervous systems
DAY23 DATE 20-4-18	-	Group C: Computer, simulated study/ model of Earthworm: Digestive, reproductive and nervous systems

NAME OF ASSISTANT PROFESSOR: DR. NEETU GARG
CLASS/SECTION: B.SC III
SUBJECT: ZOOLOGY PRACTICAL A study of the different types of nets, e.g., cast net, gill net, drift net and drag net

UNIT/PART I	**TOPIC**	
	THEORY	**PRACTICAL**
DAY4 DATE 4-1-18	-	Group B: Chemical analysis of pond water and soil for pH, dissolved oxygen, free CO_2, nitrates, phosphates and chlorides
DAY5 DATE 5-1-18	-	Group C: Chemical analysis of pond water and soil for pH, dissolved oxygen, free CO_2, nitrates, phosphates and chlorides
DAY6 DATE 6-1-18	-	Group C: Chemical analysis of pond water and soil for pH, dissolved oxygen, free CO_2, nitrates, phosphates and chlorides

DAY10 DATE 11-1-18	-	Group B: A study of the different types of nets, e.g., cast net, gill net, drift net and drag net
DAY11 DATE 12-1-18	-	Group C: A study of the different types of nets, e.g., cast net, gill net, drift net and drag net
DAY12 DATE 13-1-18	-	Group C: A study of the different types of nets, e.g., cast net, gill net, drift net and drag net
DAY16 DATE 18-1-18	-	Group B: Adaptative modifications in feet and breaks of birds
DAY17 DATE 19-1-18	-	Group C: Adaptative modifications in feet and breaks of birds
DAY18 DATE 20-1-18	-	Group C: Adaptative modifications in feet and breaks of birds
DAY19 DATE 22-1-18	**HOLIDAY**	**HOLIDAY**
DAY20 DATE 23-1-18	**SPORTS DAY**	**SPORTS DAY**
DAY21 DATE 24-1-18	**HOLIDAY**	**HOLIDAY**
DAY22 DATE 25-1-18	-	Group B: Study of permanent slides of WM of chick embryo (13-18h, 24-36h, 36-48h, 48-72h)
DAY23 DATE 26-1-18	**HOLIDAY**	**HOLIDAY**
DAY 24 DATE 27-1-18	-	Group C: Study of permanent slides of WM of chick embryo (13-18h, 24-36h, 36-48h, 48-72h)
UNIT/PART II	**TOPIC**	
	THEORY	**PRACTICAL**
DAY3 DATE 31-1-18	**HOLIDAY**	**HOLIDAY**
DAY4 DATE 1-2-18	-	Group B: Preparation of permanent/temporary slides of developmental stages of frog/mosquito
DAY5	-	Group C: Preparation of

DATE 2-2-18		permanent/temporary slides of developmental stages of frog/mosquito
DAY6 DATE 3-2-18	-	Group C: Preparation of permanent/temporary slides of developmental stages of frog/mosquito
DAY10 DATE 8-2-18	-	Group B: Window preparation and identification of stages of development in chick egg
DAY11 DATE 9-2-18	-	Group C: Window preparation and identification of stages of development in chick egg
DAY12 DATE 10-2-18	**HOLIDAY**	**HOLIDAY**
DAY14 DATE 13-2-18	**HOLIDAY**	**HOLIDAY**
DAY16 DATE 15-2-18	-	Group B: Preparation of permanent histological slides of testis
DAY17 DATE 16-2-18	-	Group C: Preparation of permanent histological slides of testis
DAY18 DATE 17-2-18	-	Group C: Preparation of permanent histological slides of ovaries
DAY22 DATE 22-2-18	-	Group B: Preparation of permanent histological slides of ovaries
DAY23 DATE 23-2-18	-	Group C: Preparation of permanent histological slides of Kidney
UNIT/PART III	**TOPIC**	
	THEORY	**PRACTICAL**
DAY1 DATE 24-2-18	-	Group C: Preparation of permanent histological slides of Intestine
DAY4 DATE 28-2-18	**HOLIDAY**	**HOLIDAY**
DAY5 DATE 1-3-18	**HOLIDAY**	**HOLIDAY**
DAY6 DATE 2-3-18	**HOLIDAY**	**HOLIDAY**
DAY7 DATE 3-3-18	**HOLIDAY**	**HOLIDAY**
DAY11	-	Group B: Preparation of

DATE 8-3-18		permanent histological slides of Kidney
DAY12 DATE 9-3-18	-	Group C: Group C: Preparation of permanent histological slides of liver
DAY13 DATE 10-3-18	-	Group C: Group C: Preparation of permanent histological slides of liver
DAY17 DATE 15-3-18	-	Group B: Group C: Preparation of permanent histological slides of Intestine
DAY18 DATE 16-3-18	-	Group C: file completion
DAY19 DATE 17-3-18	-	Group C: File completion
DAY23 DATE 22-3-18	-	Group B: Preparation of permanent histological slides of Liver
DAY 24 DATE 23-3-18	**HOLIDAY**	**HOLIDAY**
DAY 25 DATE 24-3-18	-	Group C: Staining
UNIT/PART IV	**TOPIC**	
	THEORY	**PRACTICAL**
DAY4 DATE 29-3-18	**HOLIDAY**	**HOLIDAY**
DAY5 DATE 30-3-18	-	Group C: Staining
DAY6 DATE 31-3-18	-	Group C: Staining
DAY10 DATE 5-4-18	-	Group B: Staining
DAY11 DATE 6-4-18	-	Group C: Staining
DAY12 DATE 7-4-18	-	Group C: Staining
DAY16 DATE 12-4-18	-	Group B: Staining
DAY17 DATE 13-4-18	-	Group C: Staining
DAY18 DATE 14-4-18	**HOLIDAY**	**HOLIDAY**
DAY21 DATE 18-4-18	**HOLIDAY**	**HOLIDAY**
DAY22 DATE 19-4-18	-	Group B: Staining

DAY23 DATE 20-4-18	-	Group C: Staining