

Arts, Science and Commerce College, Indapur, Dist. Pune
TEACHING AND EVALUATION PLAN

Name of the teacher: Prof Jamdade S.P	Year: 2020-21	Semester: I
Subject: Animal Diversity I	Paper: I	Class: F Y B Sc

Part I : Teaching Plan						Part II : Evaluation of Plan			
1 Sr. No.	2 Month	3 Week	4 No. of working days	5 No. of periods available	6 Topics to be taught	7 No. of periods engaged	8 Topics taught	9 Deviation in periods	10 Remark
1	Aug 2020	3 & 4	9	8	1. Principles of Classification: Taxonomy & Systematics 1.1 Taxonomy: Basic terminology and Introuction • Alpha, Beta and Gamma levels of taxonomy, Micro-taxonomy • Macro taxonomy: Phenetics (numerical taxonomy, Cladistics (Phylogenetic systematics), Evolutionary taxonomy (evolutionary systematics) • Classical taxonomy and experimental or neo taxonomy (biochemical taxonomy and	8	1. Principles of Classification: Taxonomy & Systematics 1.1 Taxonomy: Basic terminology and Introuction • Alpha, Beta and Gamma levels of taxonomy, Micro-taxonomy • Macro taxonomy: Phenetics (numerical taxonomy, Cladistics (Phylogenetic systematics), Evolutionary taxonomy (evolutionary systematics) • Classical taxonomy and experimental or neo taxonomy	Nil	---

					Cytotaxonomy) • Significance of Taxonomy 1.2 Systematics: definition introduction		(biochemical taxonomy and Cytotaxonomy) • Significance of Taxonomy 1.2 Systematics: definition introduction		
2	Sept 2020	1& 2	12	8	1.3 Linnaean system of classification (Six level classification: Phylum, class, order, family, genus, species) 1.4 Concept of Species: Biological & Evolutionary 1.5 Introduction to Binomial Nomenclature. 1.6 Introduction to Five kingdom system. 2. General Features of kingdom Animalia 2.1 General characters of Kingdom Animalia, Grades of organization 2.2 Symmetry. Kingdom Protista (Phylum: Protozoa) 3.1 Introduction to Phylum Protozoa 3.2 Salient features of Phylum Protozoa 3.3 Classification of Phylum Protozoa up to classes with two examples of each class (names only). Class Rhizopoda (e.g :Entamoeba histolytica, Arcella), Class Mastigophora (e.g: Euglena viridis, Trypanosoma gambiense), Class Ciliata (e.g Paramoecium caudatum, Opalina ranarum), Class Sporozoa (e.g Plasmodium vivax, Toxoplasma gondii) 3.4 Locomotion in Protozoa: Amoeboid, Ciliary and Flagellar with suitable examples 3.5 Type Study: Paramecium caudatum: Classification, Habit and Habitat, External morphology, Feeding and digestion, Excretion, Reproduction	10	1.3 Linnaean system of classification (Six level classification: Phylum, class, order, family, genus, species) 1.4 Concept of Species: Biological & Evolutionary 1.5 Introduction to Binomial Nomenclature. 1.6 Introduction to Five kingdom system. 2. General Features of kingdom Animalia 2.1 General characters of Kingdom Animalia, Grades of organization 2.2 Symmetry. Kingdom Protista (Phylum: Protozoa) 3.1 Introduction to Phylum Protozoa 3.2 Salient features of Phylum Protozoa 3.3 Classification of Phylum Protozoa up to classes with two examples of each class (names only). Class Rhizopoda (e.g :Entamoeba histolytica, Arcella), Class Mastigophora (e.g: Euglena viridis, Trypanosoma gambiense), Class Ciliata (e.g Paramoecium caudatum, Opalina ranarum), Class Sporozoa (e.g Plasmodium vivax, Toxoplasma gondii) 3.4 Locomotion in Protozoa: Amoeboid, Ciliary and Flagellar with suitable examples 3.5 Type Study: Paramecium caudatum: Classification, Habit and Habitat,	Nil	---

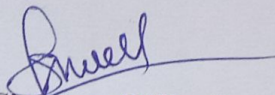
							External morphology, Feeding and digestion, Excretion, Reproduction		
3	Oct 2020	3 & 4	11	7	3.6.1-Harmful Protozoa: Plasmodium vivax (malarial parasite), Entamoeba histolytica (Amoebic dysentery), Trypanosoma gambiense (Gambian sleeping sickness). 3.6.2- Useful Protozoa: Trichonympha (07) CBCS: 2019-2020 F. Y. B. Sc. Zoology Savitribai Phule Pune University Page 8 4. Origin of Metazoa 4.1 Introduction Origin and importance of Metazoa	8	3.6.1-Harmful Protozoa: Plasmodium vivax (malarial parasite), Entamoeba histolytica (Amoebic dysentery), Trypanosoma gambiense (Gambian sleeping sickness). 3.6.2- Useful Protozoa: Trichonympha (07) CBCS: 2019-2020 F. Y. B. Sc. Zoology Savitribai Phule Pune University Page 8 4. Origin of Metazoa 4.1 Introduction Origin and importance of Metazoa	1	Extra lecture was conducted
4	Oct 2020	1 & 2	11	8	5. Phylum Porifera 5.1. Introduction to Phylum Porifera 5.2 Classification of Phylum Porifera up to classes with two examples of each class (names only, no description of specimens). Class Calcarea (e.g.: Leucosolenia, Sycon (Scypha) Class Hexactinellida (e.g: Euplectella (venus flower basket), Hyalonema (glass sponge)) Class Demospongiae (e.g: Chalina (Mermaid's gloves, Spongilla (fresh water sponge)) 5.3 Canal system in sponges: Ascon, Leucon and Rhagon type. 5.4 Skeleton in sponges: Spicules, its types: Microscleres & Megasccleres, Monoaxon – monactinal, diactinal, Amphidiscs, Triaxon, Polyaxon, Spongin fibres. 5.5 Regeneration in sponges. 5.6 Economic importance of Phylum Porifera. (06) 6. Phylum: Cnidaria 6.1 Introduction to Phylum Cnidaria 6.2	8	5. Phylum Porifera 5.1. Introduction to Phylum Porifera 5.2 Classification of Phylum Porifera up to classes with two examples of each class (names only, no description of specimens). Class Calcarea (e.g.: Leucosolenia, Sycon (Scypha) Class Hexactinellida (e.g: Euplectella (venus flower basket), Hyalonema (glass sponge)) Class Demospongiae (e.g: Chalina (Mermaid's gloves, Spongilla (fresh water sponge)) 5.3 Canal system in sponges: Ascon, Leucon and Rhagon type. 5.4 Skeleton in sponges: Spicules, its types: Microscleres & Megasccleres, Monoaxon – monactinal, diactinal, Amphidiscs, Triaxon, Polyaxon, Spongin fibres. 5.5 Regeneration in sponges. 5.6	Nil	--

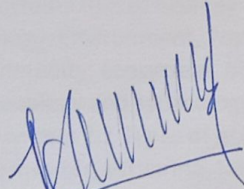
					Salient features of Phylum Cnidaria 6.3 Classification of Phylum Cnidaria up to class level with given examples each class (names of examples only) Class Hydrozoa	Economic importance of Phylum Porifera. (06) 6. Phylum: Cnidaria 6.1 Introduction to Phylum Cnidaria 6.2 Salient features of Phylum Cnidaria 6.3 Classification of Phylum Cnidaria up to class level with given examples each class (names of examples only) Class Hydrozoa	
5	Nov 2020	3 & 4	12	8	e.g.: Hydra, Physalia (Portuguese man of war) Class Scyphozoa e.g: Aurelia (Jelly fish), Leucernaria (trumpet shaped Jellyfish) Class Anthozoa: e.g; Metridium (Common sea anemone) 6.4 Polymorphism in Hydrozoa: Polyps & Medusa (polyp types: gastrozooids, dactylozooids, gonozooids) and functions 6.5 Economic importance of Cnidarians with reference to Corals and Coral reefs. 7. Phylum Platyhelminthes 7.1 Introduction to Phylum Platyhelminthes 7.2 Salient features of Phylum Platyhelminthes 7.3 Classification of Phylum Platyhelminthes up to classes with two examples each class (names of examples only). Class: Turbellaria (e.g: Dugesia, Bipallium) Class: Trematoda (e.g: Fasciola hepatica, Schistosoma haematobium) Class Cestoda: (Taenia solium (pork tape worm), Echinococcus granulosus (dog tapeworm) 7.4 Parasitic adaptations in Platyhelminthes: structural and physiological. 7.5 Economic importance of Platyhelminthes	e.g.: Hydra, Physalia (Portuguese man of war) Class Scyphozoa e.g: Aurelia (Jelly fish), Leucernaria (trumpet shaped Jellyfish) Class Anthozoa: e.g; Metridium (Common sea anemone) 6.4 Polymorphism in Hydrozoa: Polyps & Medusa (polyp types: gastrozooids, dactylozooids, gonozooids) and functions 6.5 Economic importance of Cnidarians with reference to Corals and Coral reefs. 7. Phylum Platyhelminthes 7.1 Introduction to Phylum Platyhelminthes 7.2 Salient features of Phylum Platyhelminthes 7.3 Classification of Phylum Platyhelminthes up to classes with two examples each class (names of examples only). Class: Turbellaria (e.g: Dugesia, Bipallium) Class: Trematoda (e.g: Fasciola hepatica, Schistosoma haematobium) Class Cestoda: (Taenia solium (pork tape worm), Echinococcus granulosus (dog tapeworm) 7.4 Parasitic adaptations	1

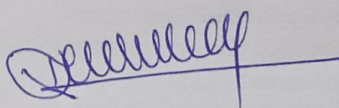
Extra lecture was conducted on sunday

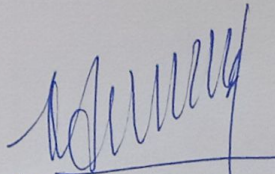
							in Platyhelminthes: structural and physiological. 7.5 Economic importance of Platyhelminthes		
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- 2 One copy of the plan should be submitted at the beginning of the term after filling up columns 1 to 6.
The second copy must be retained by the teacher and submitted at the end of the term. Part second of the plan i. e. columns 7 to 10 must be filled up progressively at the end of every week.


Signature Of Teacher


Signature Of Head Of Department
Dr. J. P. Sarwade
M.Sc., Ph.D., FZSI
Head
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Indapur, Dist. Pune - 413106


Signature Of Faculty Incharge
Science Faculty
Arts, Science & Commerce
College, Indapur, Dist. Pune


Signature of Principal
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INDAPUR-413106 DIST-PUNE

Arts, Science and Commerce College, Indapur, Dist. Pune
TEACHING AND EVALUATION PLAN

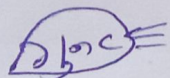
Name of the teacher: Prof Gunvare K.D.	Year: 2020-21	Semester: I
Subject: Animal Ecology	Paper: I	Class: F Y B Sc

Part I : Teaching Plan						Part II : Evaluation of Plan			
1	2	3	4	5	6	7	8	9	10
Sr. No.	Month	Week	No. of working days	No. of periods available	Topics to be taught	No. of periods engaged	Topics taught	Deviation in periods	Remark
1	Aug 2020	3 & 4	9	8	1. Introduction to Ecology 1.1 Concepts of Ecology, Environment, Population, Community, Ecosystem, Biosphere, Autecology and synecology. (02) 2. Ecosystem 2.1 Types of ecosystems: Aquatic (Freshwater, estuarine, Marine and terrestrial (Forest, Grassland and Desert) 2.2 Structure and Composition of Ecosystem (Abiotic components and biotic components.	8	1. Introduction to Ecology 1.1 Concepts of Ecology, Environment, Population, Community, Ecosystem, Biosphere, Autecology and synecology. (02) 2. Ecosystem 2.1 Types of ecosystems: Aquatic (Freshwater, estuarine, Marine and terrestrial (Forest, Grassland and Desert) 2.2 Structure and Composition of Ecosystem (Abiotic components and biotic components.	Nil	---
2	Sept 2020	1 & 2	12	8	. 2.3 Food chain: Detritus and grazing food chains, Food web, Energy flow through the ecosystem, Ecological pyramids: Number, Biomass, and Energy 2.4 concept of	10	. 2.3 Food chain: Detritus and grazing food chains, Food web, Energy flow through the ecosystem, Ecological pyramids: Number, Biomass, and	Nil	---

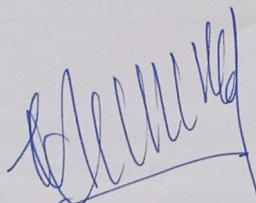
					Eutrophication in lakes and rivers. (08) 3 Population 3.1Characteristic of population: Density, Natalty, Mortality, Fecundity tables, survivorship curves, age ratio, sex ratio, dispersal and dispersion..	Energy 2.4 concept of Eutrophication in lakes and rivers. (08) 3 Population 3.1Characteristic of population: Density, Natalty, Mortality, Fecundity tables, survivorship curves, age ratio, sex ratio, dispersal and dispersion..			
3	Oct 2020	3 & 4	11	7	3.2Exponential and logistic growth, 3.3 Population regulation – density-dependent and independent factors. Population interactions, Gause’s Principle with laboratory and field interactions, 3.4 Quadrat, line and belt transect methods	3.2Exponential and logistic growth, 3.3 Population regulation – density- dependent and independent factors. Population interactions, Gause’s Principle with laboratory and field interactions, 3.4 Quadrat, line and belt transect methods	8	Nil	---
4	Oct 2020	1 & 2	11	8	4. Community 4.1Community characteristics: species richness, dominance, diversity, abundance, vertical stratification, Eco tone and edge effect; Ecological succession with one example.	4. Community 4.1Community characteristics: species richness, dominance, diversity, abundance, vertical stratification, Eco tone and edge effect; Ecological succession with one example.	8	Nil	--
5	Nov 2020	3 & 4	12	8	5. Animal interactions 5.1Introduction to Animal interactions 5.2 Types of Animal interactions with at least to suitable examples of each 5.2.1-Competition: Interspecific and intraspecific (05) CBCS: 2019-2020 F. Y. B. Sc. Zoology Savitribai Phule Pune University Page 11 5.2.2- Beneficial Associations: Commensalism (remora fish on shark, Cattle egrets on livestock), Mutualism (Termite and Trichonympha, bees and flowers, cleaning symbiosis in fish by prawns. 5.3 Antagonistic associations: Parasitism	5. Animal interactions 5.1Introduction to Animal interactions 5.2 Types of Animal interactions with at least to suitable examples of each 5.2.1-Competition: Interspecific and intraspecific (05) CBCS: 2019-2020 F. Y. B. Sc. Zoology Savitribai Phule Pune University Page 11 5.2.2- Beneficial Associations: Commensalism (remora fish on shark, Cattle egrets on livestock), Mutualism (Termite and Trichonympha, bees and flowers,	8	1	Extra lecture was conducted or sunday

					(Ascaris and man, lice and humans), Prey predation (Lion and deer).	cleaning symbiosis in fish by prawns. 5.3 Antagonistic associations: Parasitism (Ascaris and man, lice and humans), Prey predation (Lion and deer).	
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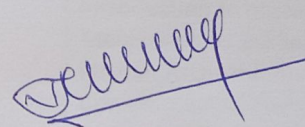


Signature Of Teacher



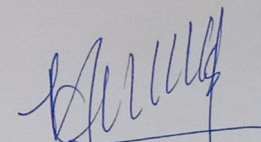
Signature Of Head Of Department

Dr. J. P. Sarwade
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Head
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Arts, Science & Commerce College,
Indapur, Dist. Pune - 413106



Signature Of Faculty Incharge

Incharge
Science Faculty
Arts, Science & Commerce
College, Indapur, Dist. Pune



Signature of Principal

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Arts, Science and Commerce College, Indapur, Dist. Pune
TEACHING AND EVALUATION PLAN

Name of the teacher: Prof Jamdade S.p.	Year: 2020-21	Semester: II
Subject: Animal Diversity-II	Paper: I	Class: F Y B Sc

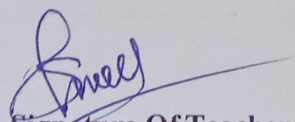
Part I : Teaching Plan						Part II : Evaluation of Plan			
1 Sr. No.	2 Month	3 Week	4 No. of working days	5 No. of periods available	6 Topics to be taught	7 No. of periods engaged	8 Topics taught	9 Deviation in periods	10 Remark
1	Nov 2020	3 & 4	9	8	1. Phylum Aschelminthes 1.1 Introduction to phylum Aschelminthes 1.2 Salient features of Phylum Aschelminthes 1.3 Classification of Phylum Aschelminthes (Class Nematoda only with two examples – Ascaris lumbricoides (common round worm), Wuchereria bancrofti (Elephantiasis)). 1.4 Economic importance of class Nematoda. (04) 2. Phylum Annelida 2.1 Introduction to Phylum Annelida 2.2 Salient features of Phylum Annelida	8	1. Phylum Aschelminthes 1.1 Introduction to phylum Aschelminthes 1.2 Salient features of Phylum Aschelminthes 1.3 Classification of Phylum Aschelminthes (Class Nematoda only with two examples – Ascaris lumbricoides (common round worm), Wuchereria bancrofti (Elephantiasis)). 1.4 Economic importance of class Nematoda. (04) 2. Phylum Annelida 2.1 Introduction to Phylum Annelida 2.2 Salient features of Phylum Annelida	Nil	---

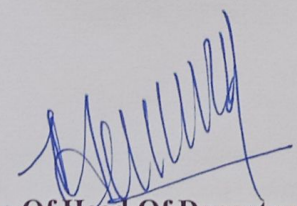
2	Dec 2020	1 & 2	12	8	<p>2.3 Classification of Phylum Annelida up to classes with examples of following classes (names of examples only). Class Polychaeta (e.g: Nereis pelagica (neries/ sand worm, Aphrodita aculeata (=Aphrodite/ seamouse) Class Oligochaeta (e.g.: Pheritima posthuma (earthworm), Class Hirudinea (e.g: Hirudinaria granulosa common cattle leech) 2.4 Economic importance of Annelida with reference to earthworms as friends of farmers and in their role in vermicomposting. (06) 3. Phylum Arthropoda 3.1 Introduction to Phylum Arthropoda</p>	10	<p>2.3 Classification of Phylum Annelida up to classes with examples of following classes (names of examples only). Class Polychaeta (e.g: Nereis pelagica (neries/ sand worm, Aphrodita aculeata (=Aphrodite/ seamouse) Class Oligochaeta (e.g.: Pheritima posthuma (earthworm), Class Hirudinea (e.g: Hirudinaria granulosa common cattle leech) 2.4 Economic importance of Annelida with reference to earthworms as friends of farmers and in their role in vermicomposting. (06) 3. Phylum Arthropoda 3.1 Introduction to Phylum Arthropoda</p>	Nil	---
3	Jan2021	3 & 4	11	7	<p>3.2 Salient features of Phylum Arthropoda 3.3 Classification of Phylum Arthropoda with specific classes and mentioned examples (names only) Class:Crustacea:Palaemon palaemon (Prawn) Brachyura spp. crabs) Class: Chilopoda: Scolopendra sp. (centipede) Class: Diplopoda: Julius sp. (millipede) Class Insecta: Periplaneta americana (American Cockroach), Anopheles stephensii (mosquito). Class: Arachnida- Spiders, Buthus sp (scorpion) 3.4 mouth parts in insects: Mandibulate (cockroach), Piercing and sucking (female Anopheles mosquito), chewing and lapping type (honey bee) 3.5 Economic importance of Arthropoda Useful Insects: Honey bee, Lac insect, Silkworm.</p>	8	<p>3.2 Salient features of Phylum Arthropoda 3.3 Classification of Phylum Arthropoda with specific classes and mentioned examples (names only) Class:Crustacea:Palaemon palaemon (Prawn) Brachyura spp. crabs) Class: Chilopoda: Scolopendra sp. (centipede) Class: Diplopoda: Julius sp. (millipede) Class Insecta: Periplaneta americana (American Cockroach), Anopheles stephensii (mosquito). Class: Arachnida- Spiders, Buthus sp (scorpion) 3.4 mouth parts in insects: Mandibulate (cockroach), Piercing and sucking (female Anopheles mosquito),</p>	1	Extra lecture was conducted

					Harmful insects: Female Anopheles mosquito, Red cotton bug, Rice weevil		chewing and lapping type (honey bee) 3.5 Economic importance of Arthropoda Useful Insects: Honey bee, Lac insect, Silkworm. Harmful insects: Female Anopheles mosquito, Red cotton bug, Rice weevil		
4	Feb 2021	1 & 2	11	8	4. Phylum Mollusca 4.1 Introduction to Phylum Mollusca 4.2 Salient features of Phylum Mollusca 4.3 Classification of Phylum Mollusca with specific classes and mentioned examples (names only) Class Gastropoda e.g Pila globosa (apple snail) • Class Pelecypoda e.g Lamellidens marginalis(Bivalve) Class Polyplacophora e.g Chiton Class: Cephalopodae.g: Octopus vulgaris (common octopus), Sepia officinalis (common Cuttle fish) 4.4 Economic importance of Mollusca	8	4. Phylum Mollusca 4.1 Introduction to Phylum Mollusca 4.2 Salient features of Phylum Mollusca 4.3 Classification of Phylum Mollusca with specific classes and mentioned examples (names only) Class Gastropoda e.g Pila globosa (apple snail) Class Pelecypoda e.g Lamellidens marginalis(Bivalve) Class Polyplacophora e.g Chiton Class: Cephalopodae.g: Octopus vulgaris (common octopus), Sepia officinalis (common Cuttle fish) 4.4 Economic importance of Mollusca	Nil	--
5	Mar 2021	3 & 4	12	8	5. Study of Phylum Echinodermata 5.1 Introduction to Phylum Echinodermata 5.2 Salient features of Phylum Echinodermata. 5.3 Classification of Phylum Echinodermata with specific classes and mentioned examples (names only) • Class Asteroidea (Asterias rubens sea stars or starfish) • Class: Holothuroidea. Holothuria sp. sea cucumbers) • Class: Echinoidea (Echinus esculentis common sea urchins) • Class: Crinoidea (sea lilies or feather stars) 5.4 Type study: Asteriasrubens (Sea Star): Classification, Habit Habitat, External	8	5. Study of Phylum Echinodermata 5.1 Introduction to Phylum Echinodermata 5.2 Salient features of Phylum Echinodermata. 5.3 Classification of Phylum Echinodermata with specific classes and mentioned examples (names only) • Class Asteroidea (Asterias rubens sea stars or starfish) • Class: Holothuroidea. Holothuria sp. sea cucumbers) • Class: Echinoidea (Echinus esculentis common sea urchins) • Class: Crinoidea (sea lilies	1	Extra lecture was conducted or sunday

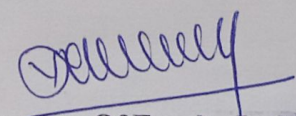
					<p>Morphology, Digestive system, Water vascular System and autotomy and regeneration 5.5 Pedicellaria in Echinodermata: straight, crossed, valvate, tridactylous, globigerous. 5.6 Economic importance of Echinodermata.</p>	<p>or feather stars) 5.4 Type study: Asterias rubens (Sea Star): Classification, Habit Habitat, External Morphology, Digestive system, Water vascular System and autotomy and regeneration 5.5 Pedicellaria in Echinodermata: straight, crossed, valvate, tridactylous, globigerous. 5.6 Economic importance of Echinodermata.</p>	
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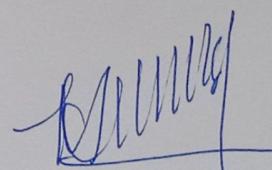
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Signature Of Teacher


Signature Of Head Of Department

Dr. J. P. Sarwade
M.Sc., Ph.D., FZSI
Head
Department of Zoology,
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Indapur, Dist. Pune - 413106


Signature Of Faculty Incharge
Incharge
Science Faculty
Arts, Science & Commerce
College, Indapur, Dist. Pune


Signature of Principal
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TEACHING AND EVALUATION PLAN

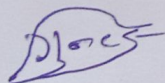
Name of the teacher: Prof Gunvare K.D.	Year: 2020-21	Semester: II
Subject: Cell Biology	Paper: II	Class: F Y B Sc

Part I : Teaching Plan						Part II : Evaluation of Plan			
1 Sr. No.	2 Month	3 Week	4 No. of working days	5 No. of periods available	6 Topics to be taught	7 No. of periods engaged	8 Topics taught	9 Deviation in periods	10 Remark
1	Nov 2020	3 & 4	9	8	1. Introduction: 1.1 Introduction cell biology, 1.2 Cell as basic unit of life. 1.3 Importance of Cell Biology and its applications in industry. Overview of Cells 1.3 Introduction to Prokaryotic and Eukaryotic cells. 1.4 Structure and function of Prokaryotic (E. coli) 1.5 Structure and function of Eukaryotic cells (Animal and Plant Cell)	8	1. Introduction: 1.1 Introduction cell biology, 1.2 Cell as basic unit of life. 1.3 Importance of Cell Biology and its applications in industry. Overview of Cells 1.3 Introduction to Prokaryotic and Eukaryotic cells. 1.4 Structure and function of Prokaryotic (E. coli) 1.5 Structure and function of Eukaryotic cells (Animal and Plant Cell)	Nil	---

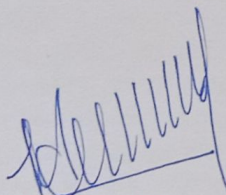
2	Dec 2020	1 & 2	12	8	2 Techniques in Cell Biology: 3.1 Introduction 3.2 Microscopy: Basic Principle, Simple, Compound and applications of Electron Microscope. 3.3 Stains and dyes: Types of Stain: Acidic, basic and neutral. Dye (Preparation and chemistry of dyes not expected) 3.4 Micrometry	10	2 Techniques in Cell Biology: 3.1 Introduction 3.2 Microscopy: Basic Principle, Simple, Compound and applications of Electron Microscope. 3.3 Stains and dyes: Types of Stain: Acidic, basic and neutral. Dye (Preparation and chemistry of dyes not expected) 3.4 Micrometry	Nil	---
3	Jan 2021	3 & 4	11	7	3 Plasma Membrane: 4.1Introduction 4.2 Structure of plasma membrane: Fluid mosaic model. 4.3Transport across membranes: Active and Passive transport, Facilitated transport, exocytosis, endocytosis, phagocytosis – vesicles and their importance in transport. 4.4 Other functions of Cell membrane in brief Protection, cell recognition, shape, storage, cell signalling. 4.5 Cell Junctions: Tight junctions, gap junctions, Desmosomes. (06) 4 Nucleus: Structure and function 5.1Introduction to Nucleus 5.2 Structure of Nucleus: Nuclear envelope, Nuclear pore complex, Nucleoplasm, Nucleolus	8	3 Plasma Membrane: 4.1Introduction 4.2 Structure of plasma membrane: Fluid mosaic model. 4.3Transport across membranes: Active and Passive transport, Facilitated transport, exocytosis, endocytosis, phagocytosis – vesicles and their importance in transport. 4.4 Other functions of Cell membrane in brief Protection, cell recognition, shape, storage, cell signalling. 4.5 Cell Junctions: Tight junctions, gap junctions, Desmosomes. (06) 4 Nucleus: Structure and function 5.1Introduction to Nucleus 5.2 Structure of Nucleus: Nuclear envelope, Nuclear pore complex, Nucleoplasm, Nucleolus	1	Extra lecture was conducted
4	Feb 2021	1 & 2	11	8	5.3 Chromatin: Eu-chromatin and Hetro-chromatin, nature and differences. 5.4 Functions of nucleus (04) 5. Endomembrane System 6.1 Introduction 6.2 Structure, location and Functions: Endoplasmic	8	5.3 Chromatin: Eu-chromatin and Hetro-chromatin, nature and differences. 5.4 Functions of nucleus (04) 5. Endomembrane System 6.1 Introduction 6.2 Structure, location and Functions: Endoplasmic	Nil	--

					Reticulum, Golgi apparatus, Lysosomes and vacuoles		Reticulum, Golgi apparatus, Lysosomes and vacuoles		
5	Mar 2021	3 & 4	12	8	7. Mitochondria and Peroxisomes 7.1 Introduction 7.2 Mitochondria: ultrastructure and function of mitochondrion 7.3 Peroxisomes Cell Division 7.1 Introduction 7.2 Cell cycle (G1, S, G2, M phases), 7.3 Mitosis. 7.4 Meiosis.	8	5.3 Chromatin: Eu-chromatin and Hetro-chromatin, nature and differences. 5.4 Functions of nucleus (04) 5. Endomembrane System 6.1 Introduction 6.2 Structure, location and Functions: Endoplasmic Reticulum, Golgi apparatus, Lysosomes and vacuoles	1	Extra lecture was conducted or sunday

- 1 The plan should be prepared in duplicate.
2 One copy of the plan should be submitted at the beginning of the term after filling up columns 1 to 6.
The second copy must be retained by the teacher and submitted at the end of the term. Part second of the plan i. e. coumns 7 to 10 must be filled up progressively at the end of every week.



Signature Of Teacher



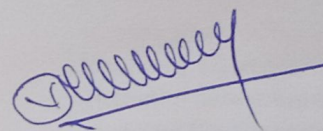
Signature Of Head Of Department

Dr. J. P. Sarwade

M.Sc., Ph.D., FZSI

Head

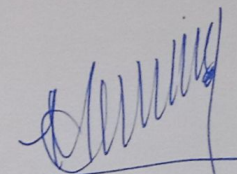
Department of Zoology,
Arts, Science & Commerce College,
Indapur, Dist. Pune - 413106



Signature Of Faculty Incharge

Incharge

Science Faculty
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Signature of Principal

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