Arts, Science and Commerce College, Indapur, Dist. Pune

TEACHING AND EVALUATION PLAN

Name of the teacher: Prof Jamdade Sonam **Year: 2019-20** **Semester: V**

Subject: Pest management **Paper: I** **Class: T 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	Nov2020	3 & 4	9	8	1.Pest: Definition, Types of pests, Types of damages caused by the pest. 2 . Pest management using Regulatory control: Quarantine, Eradication, Control districts, "Crop-free" periods.	8	1.Pest: Definition, Types of pests, Types of damages caused by the pest. 2 . Pest management using Regulatory control: Quarantine, Eradication, Control districts, "Crop-free" periods.	Nil	---
2	Dec 2020	1& 2	12	8	3. Pest management using Cultural control: Sanitation, Tillage, Crop rotation, Cropping systems. 4. Pest management using Biological control: Ecological considerations, Biological control of insects, Biological control of plant disease.Biological control of weeds.	10	3. Pest management using Cultural control: Sanitation, Tillage, Crop rotation, Cropping systems. 4. Pest management using Biological control: Ecological considerations, Biological control of insects, Biological control of plant disease.Biological control of weeds.	Nil	---

2	Dec 2020	1& 2	12	8	3 Housing Management: Establishment of poultry farm, Housing and equipment, Incubation and hatching of eggs, Broiler and layer management, Lighting schedule for poultry, Transport strategy of Poultry birds.	10	3 Housing Management: Establishment of poultry farm, Housing and equipment, Incubation and hatching of eggs, Broiler and layer management, Lighting schedule for poultry, Transport strategy of Poultry birds.	Nil	---
3	Dec 2020	3 & 4	11	7	4 Feeding Management: Digestive system and Digestion Mechanism of chicken, Feed ingredients, Feed processing, Formulation of feed viz., Starter, Grower, Layer, Finisher and Breeder ration, Feed conversion ratio (FCR), Nutritional deficiency conditions.	8	4 Feeding Management: Digestive system and Digestion Mechanism of chicken, Feed ingredients, Feed processing, Formulation of feed viz., Starter, Grower, Layer, Finisher and Breeder ration, Feed conversion ratio (FCR), Nutritional deficiency conditions.	Nil	---
4	January 2021	1 &2	11	8	5 Health Management: Vaccination schedule for poultry birds, Common poultry diseases, i. e. Ranikhet, Marek, Chicken pox, Gumboro, Infectious bronchitis and Chronic Respiratory Disease (CRD), Control of internal and external parasites.	8	5 Health Management: Vaccination schedule for poultry birds, Common poultry diseases, i. e. Ranikhet, Marek, Chicken pox, Gumboro, Infectious bronchitis and Chronic Respiratory Disease (CRD), Control of internal and external parasites.	1	Extra lecture was conducted

5	January 2021	3 & 4	12	8	6 Poultry Products: Preservation and storage of eggs, Grading of eggs and AGMARK standard of egg, Egg powder. 6.4 Slaughtering and processing of chicken, Poultry By Products – Feathers and Poultry Manure.	8	6 Poultry Products: Preservation and storage of eggs, Grading of eggs and AGMARK standard of egg, Egg powder. 6.4 Slaughtering and processing of chicken, Poultry By Products – Feathers and Poultry Manure.	1	Extra lecture was conducted

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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.
3.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
Arts,Science & Commerce
College,Indapur, Dist.Pune

Signature of Principal

PRINCIPAL
ARTS, SCIENCE AND
COMMERCE COLLEGE
INDAPUR-413106 DIST-PUNE

Arts, Science and Commerce College, Indapur, Dist. Pune

TEACHING AND EVALUATION PLAN

Name of the teacher: Pawar A.H. Year: 2019-20 Semester: V

Subject: Pest management Paper: I Class: T 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 2019	3 & 4	9	8	1.Pest: Definition, Types of pests, Types of damages caused by the pest. 2 . Pest management using Regulatory control: Quarantine, Eradication, Control districts, "Crop-free" periods.	8	1.Pest: Definition, Types of pests, Types of damages caused by the pest. 2 . Pest management using Regulatory control: Quarantine, Eradication, Control districts, "Crop-free" periods.	Nil	---
2	Sept 2019	1& 2	12	8	3. Pest management using Cultural control: Sanitation, Tillage, Crop rotation, Cropping systems. 4. Pest management using Biological control: Ecological considerations, Biological control of insects, Biological control of plant disease.Biological control of weeds.	10	3. Pest management using Cultural control: Sanitation, Tillage, Crop rotation, Cropping systems. 4. Pest management using Biological control: Ecological considerations, Biological control of insects, Biological control of plant disease.Biological control of weeds.	Nil	---

3	Oct 2019	3 & 4	11	7	5. Biotechnology approaches in pest management: Introduction, Recent advance in use of fungi and viruses, Methodology in Biotechnology, Somaclonal variability, Concept of Genetic engineering and Transgenic plants. 6. Integrated pest management (IPM): Principles and its components, Advantages and disadvantages.	8	5. Biotechnology approaches in pest management: Introduction, Recent advance in use of fungi and viruses, Methodology in Biotechnology, Somaclonal variability, Concept of Genetic engineering and Transgenic plants. 6. Integrated pest management (IPM): Principles and its components, Advantages and disadvantages.	1	Extra lecture was conducted
4	Oct 2019	1 &2	11	8	Biological control - Predators, Parasitoids, Entomopathogens, Weed killers and their mass production. 7. Insecticides: Classification of insecticides based on mode of entry. Action and chemical nature, Insecticides formulations and their uses, Safe handling of insecticides.	8	Biological control - Predators, Parasitoids, Entomopathogens, Weed killers and their mass production. 7. Insecticides: Classification of insecticides based on mode of entry. Action and chemical nature, Insecticides formulations and their uses, Safe handling of insecticides.	Nil	--
5	Nov 2019	3 & 4	12	8	8. Insecticide residue: Methods of residue detection – Organochlorine, Organophosphates, Synthetic Pyrithroides, Systemic, Problems in fruits, vegetables, medicinal plantsMaximum permissible residue limits (MRLs).	8	8. Insecticide residue: Methods of residue detection – Organochlorine, Organophosphates, Synthetic Pyrithroides, Systemic, Problems in fruits, vegetables, medicinal plantsMaximum permissible residue limits (MRLs).	1	Extra lecture was conducted or sunday

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M.Sc.,Ph.D.,FZSI
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Indapur, Dist. Pune - 413106

Incharge
Science Faculty
Arts,Science & Commerce
College Indapur

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Name of the teacher: Mohite P.I. **Year:** 2019-20 **Semester:** V

Subject: Histology **Paper:** II **Class:** T 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	Aug2019	3 & 4	9	8	1. Introduction: Definition and Scope of Histology. 2. Definitions and Review of Types of Tissues: Epithelial tissue, Connective tissue, Nervous tissue, Muscular tissue. 3. Histological study of following mammalian organs:Skin (V. S.), Tooth (V. S.)	8	1. Introduction: Definition and Scope of Histology. 2. Definitions and Review of Types of Tissues: Epithelial tissue, Connective tissue, Nervous tissue, Muscular tissue. 3. Histological study of following mammalian organs:Skin (V. S.), Tooth (V. S.)	Nil	---
2	Sept 2019	1& 2	12	8	Tongue (C. S.) with reference to mucosa papillae and taste buds. 4. Histological study of Alimentary canal and Liver: Oesophagus (T. S.), Stomach (T. S.), Duodenum (T. S.), Rectum (T. S.), Liver (C. S.).	10	Tongue (C. S.) with reference to mucosa papillae and taste buds. 4. Histological study of Alimentary canal and Liver: Oesophagus (T. S.), Stomach (T. S.), Duodenum (T. S.), Rectum (T. S.), Liver (C. S.).	1	Extra lecture was conducted

3	Oct 2019	3 & 4	11	7	5. Histological study of Respiratory organs: Trachea (T. S.), Lung (C. S.). 6. Histological study of Excretory organs: Kidney (L. S.), Juxtaglomerular complex.	8	5. Histological study of Respiratory organs: Trachea (T. S.), Lung (C. S.). 6. Histological study of Excretory organs: Kidney (L. S.), Juxtaglomerular complex.	Nil	---
4	Oct 2019	1 &2	11	8	7.Histological study of Reproductive organs:Testis (T. S.) with reference to Seminiferous Tubules and Cells of Leydig, Ovary (C. S.)	8	7.Histological study of Reproductive organs:Testis (T. S.) with reference to Seminiferous Tubules and Cells of Leydig, Ovary (C. S.)	Nil	---
5	Nov 2019	3 & 4	12	8	8. Histology of Endocrine glands: Pituitary gland, Thyroid gland, Adrenal gland, Pancreas (C. S.) including both exocrine and endocrine components.	8	8. Histology of Endocrine glands: Pituitary gland, Thyroid gland, Adrenal gland, Pancreas (C. S.) including both exocrine and endocrine components.	1	Extra lecture conducted

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Name of the teacher: Prof . Mengade N.S. Year: 2019-20 Semester; V

Subject: Biological chemistry Paper: III Class: T 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	Remarks
1	Aug 2019	3 & 4	9	8	1. Introduction of Biochemistry: Importance of Biochemistry in Life Sciences. 2. p H and Buffers: Concept of pH, Concept of pH scale, biological significance of p H , Concept of acid and base, Ionization of acids and bases. Derivation of Henderson-Hassel Balch equation & its applications. Buffer - Definition, Concept, Functions, Types of buffer and Buffering Capacity.	8	1. Introduction of Biochemistry: Importance of Biochemistry in Life Sciences. 2. p H and Buffers: Concept of pH, Concept of pH scale, biological significance of p H , Concept of acid and base, Ionization of acids and bases. Derivation of Henderson-Hassel Balch equation & its	Nil	---

							applications. Buffer - Definition, Concept, Functions, Types of buffer and Buffering Capacity.		
2	Sept 2019	1& 2	12	8	3. Carbohydrates: Definition, Classification & Biological importance of Carbohydrate, Isomerism in carbohydrates - Structural and Stereoisomerism, Significance of Gluconeogenesis, Glycogenolysis and Glycogenesis, Clinical Significance - Hypoglycemia and Hyperglycemia. 4. Amino acids and Proteins: General Structure of amino acids and Peptide bond, Essential and non-essential amino acids.	10	3. Carbohydrates: Definition, Classification & Biological importance of Carbohydrate, Isomerism in carbohydrates - Structural and Stereoisomerism, Significance of Gluconeogenesis, Glycogenolysis and Glycogenesis, Clinical Significance - Hypoglycemia and Hyperglycemia. 4. Amino acids and Proteins: General Structure of amino acids and Peptide bond, Essential and non-essential amino acids.	Nil	---
3	Oct 2019	3 & 4	11	7	Types of proteins, protein structures (primary, secondary, tertiary and quaternary structures with suitable example), Forces responsible for their stability, Biological importance of proteins – Biocatalysts, Carrier proteins Contractile proteins, Hormonal role of proteins. 5. Enzymes:Nomenclature, Types and properties of enzymes.	8	Types of proteins, protein structures (primary, secondary, tertiary and quaternary structures with suitable example), Forces responsible for their stability, Biological importance of proteins – Biocatalysts, Carrier proteins Contractile proteins, Hormonal role of proteins. 5. Enzymes:Nomenclature, Types and properties of enzymes.	1	Extra lecture was conducted
4	Oct 2019	1 &2	11	8	Regulatory and non-regulatory enzymes, Enzyme inhibition, Factors influencing enzyme activity (pH, temperature, substrate concentration, Introduction of isoenzymes and cofactor, Clinical significance of enzymes - PKU and AKU.	8	Regulatory and non-regulatory enzymes, Enzyme inhibition, Factors influencing enzyme activity (pH, temperature, substrate concentration, Introduction of isoenzymes and cofactor, Clinical	Nil	---

							significance of enzymes - PKU and AKU.		
5	Nov 2019	3 & 4	12	8	6. Lipids: Introduction, Fatty acids - Types and nomenclature (saturated and unsaturated), Clinical significance (obesity, atherosclerosis, myocardial infarction), Biological importance of lipids.	8	6. Lipids: Introduction, Fatty acids - Types and nomenclature (saturated and unsaturated), Clinical significance (obesity, atherosclerosis, myocardial infarction), Biological importance of lipids.	Nil	---

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Name of the teacher:	**Prof. Dr Salunkhe R.V.**		
Subject: Genetics	**Year: 2019-20**	**Semester: V**	
	Paper: IV	**Class: T 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**	**Remarks**
1	Aug 2019	3 & 4	9	8	1.Introduction to genetics: Classical and Modern concept of Gene, Cistron, Muton, Recon, Mendel's laws of Inheritance. 2 Exceptions to Mendelian Inheritance: 2.1 Incomplete dominance,Co-dominance, Multiple alleles: Concept, characteristics and importance of multiple. alleles, ABO & Rh - blood group system and its medico legal importance. Lethal alleles.	8	1.Introduction to genetics: Classical and Modern concept of Gene, Cistron, Muton, Recon, Mendel's laws of Inheritance. 2 Exceptions to Mendelian Inheritance: 2.1 Incomplete dominance,Co-dominance, Multiple alleles: Concept, characteristics and importance of multiple. alleles, ABO & Rh - blood group system and its medico legal importance. Lethal alleles.	Nil	---
2	Sept 2019	1& 2	12	8	3. Gene Mutation: Definition, Types of mutations: spontaneous, induced, somatic, gametic, forward, reverse. Types of point mutation - deletion, insertion, substitution, transversion, transition, Mutagenic agents a) UV radiation and ionising radiation. b) Base analogs, alkylating and intercalating agents.	10	3. Gene Mutation: Definition, Types of mutations: spontaneous, induced, somatic, gametic, forward, reverse. Types of point mutation - deletion, insertion, substitution, transversion, transition, Mutagenic agents a) UV radiation and ionising radiation. b) Base analogs, alkylating and intercalating agents.	1	Extra lecture was conducted

3	Oct 2019	3 & 4	11	7	4. Sex-determination :Introduction, Types of sex determination: -XX-XY, ZZ-ZW, XX-XO and Parthenogenesis, Hypodiploidy. Gynandromorphism. 5. Population Genetics: Basic Concepts in population genetics: Mendelian population, gene pool, gene / allele, Frequency, chance mating (Panmictic mating).	8	4. Sex-determination :Introduction, Types of sex determination: -XX-XY, ZZ-ZW, XX-XO and Parthenogenesis, Hypodiploidy. Gynandromorphism. 5. Population Genetics: Basic Concepts in population genetics: Mendelian population, gene pool, gene / allele, Frequency, chance mating (Panmictic mating).	Nil	---
4	Oct 2019	1 &2	11	8	Hardy Weinberg law and its equilibrium. 6. Human Population Genetics: Karyotype. Genetic disorders, Structural & numerical alterations of chromosomes (chromosomal aneuploidy - Down, Patau, Edward, Turner and Klinefelter syndromes).	8	Hardy Weinberg law and its equilibrium. 6. Human Population Genetics: Karyotype. Genetic disorders, Structural & numerical alterations of chromosomes (chromosomal aneuploidy - Down, Patau, Edward, Turner and Klinefelter syndromes).	1	Extra lecture was conducted
5	Nov 2019	3 & 4	12	8	7. Sex linked inheritance in human: Colour – blindness, Haemophilia, Hypertrichosis. 8. Application of genetics: Genetic counselling, Diagnostics & breeding technology.	8	7. Sex linked inheritance in human: Colour – blindness, Haemophilia, Hypertrichosis. 8. Application of genetics: Genetic counselling, Diagnostics & breeding technology.	Nil	---

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					4.Fertilization: Concept and types, Chemotaxis, Sperm penetration: Acrosome reaction, Capacitation & Decapacitation.		4.Fertilization: Concept and types, Chemotaxis, Sperm penetration: Acrosome reaction, Capacitation & Decapacitation.		
3	Oct 2019	3 & 4	11	7	Activation of ovum: Fertilization cone, Prevention of polyspermy: Fast block & Slow block, Significance of fertilization. 5. Cleavage and Blastula: Planes and symmetry of cleavage, Types of cleavage, Significance of cleavage, Definition and types of Blastula.	8	Activation of ovum: Fertilization cone, Prevention of polyspermy: Fast block & Slow block, Significance of fertilization. 5. Cleavage and Blastula: Planes and symmetry of cleavage, Types of cleavage, Significance of cleavage, Definition and types of Blastula.	Nil	---
4	Oct 2019	1 &2	11	8	6. Gastrulation: Definition and Concept, Basic cell movements in gastrulation: Epiboly, Emboly, Convergence, Invagination, Ingression & Involution with reference to frog, Concept of Organizer : Primary, Secondary and Tertiary. 7. Chick Embryology: Structure of Hen's egg.	8	6. Gastrulation: Definition and Concept, Basic cell movements in gastrulation: Epiboly, Emboly, Convergence, Invagination, Ingression & Involution with reference to frog, Concept of Organizer : Primary, Secondary and Tertiary. 7. Chick Embryology: Structure of Hen's egg.	1	Extra Lecture was conducted
5	Nov 2019	3 & 4	12	8	6. Gastrulation: Definition and Concept, Basic cell movements in gastrulation: Epiboly, Emboly, Convergence, Invagination, Ingression & Involution with reference to frog, Concept of Organizer : Primary, Secondary and Tertiary. 7. Chick Embryology: Structure of Hen's egg.	8	6. Gastrulation: Definition and Concept, Basic cell movements in gastrulation: Epiboly, Emboly, Convergence, Invagination, Ingression & Involution with reference to frog, Concept of Organizer : Primary, Secondary and Tertiary. 7. Chick Embryology: Structure of Hen's egg.	Nil	---

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Name of the teacher: Pro Dr Salunkhe R.V. **Year: 2019 -20** **Semester: V**

Subject: Parasitology **Paper : VI** **Class: T 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	Remarks
1	Aug 2019	3 & 4	9	8	1. Introduction, Scope and Branches of Parasitology: Definition: host, parasite, vector, commensalisms, mutualism and parasitism, Branches of parasitology. 2. Types of Parasites and Hosts: Ectoparasites, Endoparasites and its subtypes, Types of hosts - Intermediate, definitive, paratenic and reservoir	8	1. Introduction, Scope and Branches of Parasitology: Definition: host, parasite, vector, commensalisms, mutualism and parasitism, Branches of parasitology. 2. Types of Parasites and Hosts: Ectoparasites, Endoparasites and its subtypes, Types of hosts - Intermediate, definitive, paratenic and reservoir	Nil	---
2	Sept 2019	1& 2	12	8	3. Host - Parasite relationship: Host specificity, Types of host specificity: structural specificity, physiological specificity and ecological specificity. 3.3 Effects of parasite on host. 4. Study of Parasitic Protists: Entamoeba histolytica - Morphology, Life Cycle, Prevalence, Epidemiology, Pathogenicity, Diagnosis, Prophylaxis and Treatment.	10	3. Host - Parasite relationship: Host specificity, Types of host specificity: structural specificity, physiological specificity and ecological specificity. 3.3 Effects of parasite on host. 4. Study of Parasitic Protists: Entamoeba histolytica - Morphology, Life Cycle, Prevalence, Epidemiology, Pathogenicity, Diagnosis, Prophylaxis and Treatment.	1	Extra Lecture was conducted

3	Oct 2019	3 & 4	11	7	Plasmodium vivax - Morphology, Life Cycle, Prevalence, Epidemiology, Pathogenicity, Diagnosis, Prophylaxis and Treatment. lumbricoides - Study of Morphology, Life Cycle, 5. Study of Parasitic worms: Ascaris Prevalence. Epidemiology, Pathogenicity, Diagnosis, Prophylaxis and Treatment.	8	Plasmodium vivax - Morphology, Life Cycle, Prevalence, Epidemiology, Pathogenicity, Diagnosis, Prophylaxis and Treatment. lumbricoides - Study of Morphology, Life Cycle, 5. Study of Parasitic worms: Ascaris Prevalence. Epidemiology, Pathogenicity, Diagnosis, Prophylaxis and Treatment.	Nil	---
4	Oct 2019	1 &2	11	8	Taenia solium (Tapeworm) - Study of Morphology, Life Cycle, Prevalence, Epidemiology, Pathogenicity, Diagnosis, Prophylaxis and Treatment.	8	Taenia solium (Tapeworm) - Study of Morphology, Life Cycle, Prevalence, Epidemiology, Pathogenicity, Diagnosis, Prophylaxis and Treatment.	Nil	---
5	Nov 2019	3 & 4	12	8	6 Study of Parasitic Arthropoda: Morphology, pathogenicity and control measures of –Soft tick, Head louse, Rat flea, Bed bug.	8	6 Study of Parasitic Arthropoda: Morphology, pathogenicity and control measures of –Soft tick, Head louse, Rat flea, Bed bug.	Nil	---

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Name of the teacher: prof . Mohite p.I. Year: 2019-20 Semester: V

Subject: Aquarium Management Paper: - Class: T 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 2019	3 & 4	9	8	1. Introduction to Aquarium Fish Keeping: The potential scope of Aquarium Fish Industry as a Cottage Industry, Exotic and Endemic species of Aquarium Fishes. Nutritional value of fish. 2. Biology of Aquarium Fishes: Common characters and sexual dimorphism of Aquarium fishes - Guppy, Molly, Sword tail, Gold fish,	8	1. Introduction to Aquarium Fish Keeping: The potential scope of Aquarium Fish Industry as a Cottage Industry, Exotic and Endemic species of Aquarium Fishes. Nutritional value of fish. 2. Biology of Aquarium Fishes: Common characters and sexual dimorphism of Aquarium fishes - Guppy, Molly, Sword tail, Gold fish,	Nil	---
2	Sept 2019	1& 2	12	8	Angel fish, Blue morph, Anemone fish, Butterfly fish and Fighter fish. 3. Food and feeding of Aquarium Fishes: Use of live fish feed organisms, Preparation and composition of formulated fish feeds, Overview on types of fish food	10	Angel fish, Blue morph, Anemone fish, Butterfly fish and Fighter fish. 3. Food and feeding of Aquarium Fishes: Use of live fish feed organisms, Preparation and composition of formulated fish feeds, Overview on types of fish food	Nil	---
3	Oct 2019	3 & 4	11	7	4. Fish Transportation: Live fish transport: a) Fish handling. b) Fish packing. c) Fish forwarding techniques. Causes of mortality in transport.	8	4. Fish Transportation: Live fish transport: a) Fish handling. b) Fish packing. c) Fish forwarding techniques. Causes of mortality in transport.	1	Extra lecture was conducte

					5. Maintenance of Aquarium: General Aquarium Maintenance - budget for setting up an Aquarium. Fish Farm as a Cottage Industry, Rules & regulations of fish rearing, Common diseases of Aquarium fish.		5. Maintenance of Aquarium: General Aquarium Maintenance - budget for setting up an Aquarium. Fish Farm as a Cottage Industry, Rules & regulations of fish rearing, Common diseases of Aquarium fish.		
4	Oct 2019	1 &2	11	8	Physico-chemical parameters of water for fish culture: Acidity, Alkalinity, Calcium, Nitrate, Ammonia, Total hardness. 7. Fish preservation: Fish preservation and processing. Fish preservation techniques.	8	Physico-chemical parameters of water for fish culture: Acidity, Alkalinity, Calcium, Nitrate, Ammonia, Total hardness. 7. Fish preservation: Fish preservation and processing. Fish preservation techniques.	Nil	---
5	Nov 2019	3 & 4	12	8	8. Fish breeding: Types of fish breeding - a) Natural fish breeding. b) Induced fish breeding.	8	8. Fish breeding: Types of fish breeding - a) Natural fish breeding. b) Induced fish breeding.	Nil	---

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Signature Of Teacher **Signature Of Head Of Department** **Signature Of Faculty Incharge** **Signature of Principal**

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

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

PRINCIPAL
ARTS, SCIENCE AND
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INDAPUR-413106 DIST-PUNE

Name of the teacher: Prof Gunware K.D.	Year: 2019-20		Semester: V
Subject: Poultry Management	Paper:-	Class: T 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	Remarks
1	Aug 2019	3 & 4	9	8	1. Introduction to Poultry Farming: Definition of Poultry, Importance of Poultry Farming and Poultry Development in India, Present and future prospects. 2 Breeding Management: Male and female reproductive system of chicken, Breeds and strains of broilers and layers of chicken, General aspects of breeding for better egg production and body weight gain, Selection	8	1. Introduction to Poultry Farming: Definition of Poultry, Importance of Poultry Farming and Poultry Development in India, Present and future prospects. 2 Breeding Management: Male and female reproductive system of chicken, Breeds and strains of broilers and layers of chicken, General aspects of breeding for better egg production and body weight gain, Selection and culling, Artificial insemination	Nil	---

					and culling, Artificial insemination				
2	Sept 2019	1& 2	12	8	3 Housing Management: Establishment of poultry farm, Housing and equipment, Incubation and hatching of eggs, Broiler and layer management, Lighting schedule for poultry, Transport strategy of Poultry birds.	10	3 Housing Management: Establishment of poultry farm, Housing and equipment, Incubation and hatching of eggs, Broiler and layer management, Lighting schedule for poultry, Transport strategy of Poultry birds.	Nil	---
3	Oct 2019	3 & 4	11	7	4 Feeding Management: Digestive system and Digestion Mechanism of chicken, Feed ingredients, Feed processing, Formulation of feed viz., Starter, Grower, Layer, Finisher and Breeder ration, Feed conversion ratio (FCR), Nutritional deficiency conditions.	8	4 Feeding Management: Digestive system and Digestion Mechanism of chicken, Feed ingredients, Feed processing, Formulation of feed viz., Starter, Grower, Layer, Finisher and Breeder ration, Feed conversion ratio (FCR), Nutritional deficiency conditions.	Nil	---
4	Oct 2019	1 &2	11	8	5 Health Management: Vaccination schedule for poultry birds, Common poultry diseases, i. e. Ranikhet, Marek, Chicken pox, Gumboro, Infectious bronchitis and Chronic Respiratory Disease (CRD), Control of	8	5 Health Management: Vaccination schedule for poultry birds, Common poultry diseases, i. e. Ranikhet, Marek, Chicken pox, Gumboro, Infectious bronchitis and Chronic Respiratory Disease (CRD), Control of internal and external parasites.	1	Extra lecture was conducted

					internal and external parasites.				
5	Nov 2019	3 & 4	12	8	6 Poultry Products: Preservation and storage of eggs, Grading of eggs and AGMARK standard of egg, Egg powder. 6.4 Slaughtering and processing of chicken, Poultry By Products – Feathers and Poultry Manure.	8	6 Poultry Products: Preservation and storage of eggs, Grading of eggs and AGMARK standard of egg, Egg powder. 6.4 Slaughtering and processing of chicken, Poultry By Products – Feathers and Poultry Manure.	1	Extra lecture was conducted

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Signature of Teacher **Signature of Head of Department** **Signature of Faculty In-charge** **Signature of the Principal**

Dr. J. P. Sanwade M.Sc.,Ph.D.,FZSI Head Department of Zoology, Arts, Science & Commerce College, Indapur, Dist. Pune - 413106

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

PRINCIPAL ARTS AND COLLEGE INDAPUR DIST-PUNE

Name of the teacher: Prof Mohite Punam	**Year:** 2019-20
Semester: VI	
Subject: ZO 362 - Animal Physiology	**Paper:** II **Class:** T 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	Remarks
1	Nov2020	3 & 4	9	8	1. Nutrition and digestion: Nutritional requirement & balanced diet, Digestion and absorption of carbohydrates, proteins and lipids, Vitamins - outline of fat soluble and water-soluble vitamins; Sources, deficiency and diseases. 2. Respiration: Mechanism of respiration: Regulation of ventilation in lungs, exchange of gases at respiratory surface	8	1. Nutrition and digestion: Nutritional requirement & balanced diet, Digestion and absorption of carbohydrates, proteins and lipids, Vitamins - outline of fat soluble and water-soluble vitamins; Sources, deficiency and diseases. 2. Respiration: Mechanism of respiration: Regulation of ventilation in lungs, exchange of gases at respiratory surface	Nil	---
2	Dec 2020	1& 2	12	8	Respiratory pigments in animals: Haemoglobin, Hemocyanin, Hemerythrin, Chlorocruorin, Transport of gases : O2 and CO2 transport. 3. Circulation: Blood: Definition and its constituents, functions of blood, Heart:	10	Respiratory pigments in animals: Haemoglobin, Hemocyanin, Hemerythrin, Chlorocruorin, Transport of gases : O2 and CO2 transport. 3. Circulation: Blood: Definition and its constituents, functions of blood, Heart:	Nil	---

					Structure of human heart, Pace maker, Cardiac Cycle, Origin and conduction of heart beat.		Structure of human heart, Pace maker, Cardiac Cycle, Origin and conduction of heart beat.		
3	Dec 2020	3 & 4	11	7	4. Excretion: Structure of Uriniferous tubule, Mechanism of urine formation, Normal and abnormal constituents of urine, Elementary idea of dialysis. 5. Muscles: Structure of smooth, skeletal and cardiac muscles.	8	4. Excretion: Structure of Uriniferous tubule, Mechanism of urine formation, Normal and abnormal constituents of urine, Elementary idea of dialysis. 5. Muscles: Structure of smooth, skeletal and cardiac muscles.	1	Extra lecture was conducted
4	January 2021	1 &2	11	8	Mechanism of muscle contraction by Sliding filament theory. 6. Reproduction and Endocrine Glands: Physiology of male reproduction, hormonal control of spermatogenesis.	8	Mechanism of muscle contraction by Sliding filament theory. 6. Reproduction and Endocrine Glands: Physiology of male reproduction, hormonal control of spermatogenesis.	Nil	---
5	January 2021	3 & 4	12	8	Physiology of female reproduction, hormonal control of menstrual cycle, Structure and functions of pituitary, thyroid, parathyroid, pancreas and adrenal glands.	8	Physiology of female reproduction, hormonal control of menstrual cycle, Structure and functions of pituitary, thyroid, parathyroid, pancreas and adrenal glands.	Nil	---

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Name of the teacher: Prof vyawhare Vandana		**Year: 2019-20**
Semester: VI		
Subject: Molecular Biology	**Paper: III**	**Class: T 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**	**Remarks**
1	Nov2020	3 & 4	9	8	1. Nucleic Acids and Chromatin: Structure of RNA & DNA, Types of RNA, DNA as genetic material - evidences (Griffith's, Avery et al., Hershey and Chase experiment), RNA as genetic material - TMV 4, Structure of Chromatin, packaging of DNA, Heterochromatin, Euchromatin.	8	1. Nucleic Acids and Chromatin: Structure of RNA & DNA, Types of RNA, DNA as genetic material - evidences (Griffith's, Avery et al., Hershey and Chase experiment), RNA as genetic material - TMV 4, Structure of Chromatin, packaging of DNA, Heterochromatin, Euchromatin.	Nil	---
2	Dec 2020	1& 2	12	8	2. Central Dogma of Molecular Biology: DNA Replication - Semiconservative (Messelson and Stahl experiment), Basic mechanism of replication in prokaryotes and eukaryotes	10	2. Central Dogma of Molecular Biology: DNA Replication - Semiconservative (Messelson and Stahl experiment), Basic mechanism of replication in prokaryotes and eukaryotes	Nil	---
3	Dec 2020	3 & 4	11	7	Transcription - Basic mechanism of transcription in prokaryotes and eukaryotes, RNA polymerase enzyme in prokaryotes. RNA modifications and processing (splicing - mRNA, modifications at 3'and 5' end).	8	Transcription - Basic mechanism of transcription in prokaryotes and eukaryotes, RNA polymerase enzyme in prokaryotes. RNA modifications and processing (splicing - mRNA, modifications at 3'and 5' end).	Nil	---

4	January 2021	1 &2	11	8	Translation - Genetic code, properties of genetic code, Basic mechanism of Translation in E. coli and eukaryotic cells. 3. Lac operon: 4. DNA repair mechanism: Photo repair, dark repair, base excision repair.	8	Translation - Genetic code, properties of genetic code, Basic mechanism of Translation in E. coli and eukaryotic cells. 3. Lac operon: 4. DNA repair mechanism: Photo repair, dark repair, base excision repair.	1	Extra lecture was conducted
5	January 2021	3 & 4	12	8	5. Recombinant DNA Technology: Introduction, restriction enzymes, cloning vector, PCR (polymerase chain reaction), DNA finger printing.	8	5. Recombinant DNA Technology: Introduction, restriction enzymes, cloning vector, PCR (polymerase chain reaction), DNA finger printing.	1	Extra lecture was conducted

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INDAPUR-413106 DIST-PUNE

Name of the teacher: Prof Dr. Salunkhe R.V. Year: 2019-20
Semester: VI

Subject: Entomology Paper: IV Class: T 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	Remarks
1	Nov2020	3 & 4	9	8	1. Fundamentals of Entomology: Definition and scope of Entomology, General Classification of Insects,General Characters of Insects. 2. Insect Morphology: Insect Integument and its derivatives, Insect Head, Head Orientations, Head articulations, Insect antennae and Mouth parts.	8	1. Fundamentals of Entomology: Definition and scope of Entomology, General Classification of Insects,General Characters of Insects. 2. Insect Morphology: Insect Integument and its derivatives, Insect Head, Head Orientations, Head articulations, Insect antennae and Mouth parts.		
2	Dec 2020	1& 2	12	8	2.3 Insect Thorax, Insect Wing and modifications, Insect Leg and Modifications – a) Cursorial –	10	2.3 Insect Thorax, Insect Wing and modifications, Insect Leg and Modifications – a) Cursorial – Cockroach, b) Fossorial – Mole cricket, c) Saltorial –	Nil	---

					Cockroach, b) Fossorial – Mole cricket, c) Saltorial – Grasshopper, d) Raptorial – Praying mantis, e) Pollen basket – Honey bee, Insect Abdomen, Genital and Pre – genital appendages of Grasshopper 3. Insect Anatomy (Grasshopper): Digestive System, Circulatory System		Grasshopper, d) Raptorial – Praying mantis, e) Pollen basket – Honey bee, Insect Abdomen, Genital and Pre – genital appendages of Grasshopper 3. Insect Anatomy (Grasshopper): Digestive System, Circulatory System		
3	Dec 2020	3 & 4	11	7	Nervous System, Respiratory System, Reproductive System. 4. Insect Ecology: Definition of Insect Ecology, Abiotic Factors (Photoperiod, Temperature and Humidity) and Biotic Factors (Food, Foraging and Nesting), Mimicry in insects with suitable examples.	8	Nervous System, Respiratory System, Reproductive System. 4. Insect Ecology: Definition of Insect Ecology, Abiotic Factors (Photoperiod, Temperature and Humidity) and Biotic Factors (Food, Foraging and Nesting), Mimicry in insects with suitable examples.	Nil	---
4	January 2021	1 &2	11	8	5. Insect Metamorphosis: Definition, Types and examples of Metamorphosis. 6. Insects as social groups: Definition & significance of Eusociality, Intraspecific and Interspecific relationships among insects.	8	5. Insect Metamorphosis: Definition, Types and examples of Metamorphosis. 6. Insects as social groups: Definition & significance of Eusociality, Intraspecific and Interspecific relationships among insects.	Nil	---
5	January 2021	3 & 4	12	8	Social organization in Wasps and Termites. 7. Economic Importance of Insects: Insects in Research, Insects in Medicines and Cosmetics, Insects as Vectors, Insects as food.	8	Social organization in Wasps and Termites. 7. Economic Importance of Insects: Insects in Research, Insects in Medicines and Cosmetics, Insects as Vectors, Insects as food.	Nil	---

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INDAPUR-413106 DIST-PUNE

Name of the teacher: Prof Mohite Punam	Year: 2019-20
Semester: VI	
Subject: ZO 365 - Techniques in Biology	Paper: V Class: T 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	Remarks
1	Nov2020	3 & 4	9	8	1.Microscopy: Definitions - Resolving Power, Limit of Resolution and Magnification, Numerical Aperture. Basic principle of microscopes - Light, Fluorescence, Phase Contrast, Stereo Microscope, SEM and TEM. 2. Microtomy: Tissue fixation and Processing, Methods of tissue fixation: Chemical fixation and physical fixation, Procurement of tissue and importance of fixation of tissues, Dehydration, clearing, impregnation, embedding and block making.	8	1.Microscopy: Definitions - Resolving Power, Limit of Resolution and Magnification, Numerical Aperture. Basic principle of microscopes - Light, Fluorescence, Phase Contrast, Stereo Microscope, SEM and TEM. 2. Microtomy: Tissue fixation and Processing, Methods of tissue fixation: Chemical fixation and physical fixation, Procurement of tissue and importance of fixation of tissues, Dehydration, clearing, impregnation, embedding and block making.	Nil	---
2	Dec 2020	1& 2	12	8	Types of microtomes, Section cutting: steps and precautions, common faults in section cutting, reasons & remedies, Mounting and spreading of ribbons, General procedure for staining of sections, Demonstration of Nucleic acid (Feulgen Reaction). 3. Haematological Techniques: Total count of RBCs, WBCs and Differential count of WBCs and their significance,	10	Types of microtomes, Section cutting: steps and precautions, common faults in section cutting, reasons & remedies, Mounting and spreading of ribbons, General procedure for staining of sections, Demonstration of Nucleic acid (Feulgen Reaction). 3. Haematological Techniques: Total count of RBCs, WBCs and Differential count of WBCs and their significance, Bleeding time,	1	Extra lecture was conducted

					Bleeding time, clotting time and their significanc		clotting time and their significanc		
3	Dec 2020	3 & 4	11	7	4. Immunological Techniques: Antigen-Antibody Interactions – Immunodiffusion, Principle & Working of ELISA, Raising Monoclonal Antibodies, Application of Immunological techniques in disease diagnosis. 5. Types of PCR & DNA Barcoding :	8	4. Immunological Techniques: Antigen-Antibody Interactions – Immunodiffusion, Principle & Working of ELISA, Raising Monoclonal Antibodies, Application of Immunological techniques in disease diagnosis. 5. Types of PCR & DNA Barcoding :	Nil	---
4	January 2021	1 &2	11	8	6. Methods in Biodiversity: Introduction to sampling and sample size, Biodiversity Indices - Species richness, Simpson Diversity Index, Shannon Diversity Index, Measuring Biodiversity- Quadrat sampling, Transect sampling, Insect survey - Active (sweep netting, aquatic nets) and Passive methodology (Pit fall traps, Light traps).	8	6. Methods in Biodiversity: Introduction to sampling and sample size, Biodiversity Indices - Species richness, Simpson Diversity Index, Shannon Diversity Index, Measuring Biodiversity- Quadrat sampling, Transect sampling, Insect survey - Active (sweep netting, aquatic nets) and Passive methodology (Pit fall traps, Light traps).	Nil	---
5	January 2021	3 & 4	12	8	7. Instruments in Field Biology: Binoculars, GPS, Basic digital camera techniques: Camera lens - prime and kit lens, Aperture mode, Shutter mode, Megapixels, Telephoto lens, macro lens, Adapters for camera and microscopes, Mobile's camera. 8. Laboratory techniques: Microphotographic techniques - CCD and CMOS camera, digital camera, Software for image analysis - Image J and GIMP.	8	7. Instruments in Field Biology: Binoculars, GPS, Basic digital camera techniques: Camera lens - prime and kit lens, Aperture mode, Shutter mode, Megapixels, Telephoto lens, macro lens, Adapters for camera and microscopes, Mobile's camera. 8. Laboratory techniques: Microphotographic techniques - CCD and CMOS camera, digital camera, Software for image analysis - Image J and GIMP.	Nil	---

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INDAPUR-413106 DIST-PUNE

Name of the teacher: Prof. Gunvare K.D. **Year:** 2019-20
Semester: VI
Subject: ZO 366 - Evolutionary Biology **Paper:** VI **Class:** T 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	Remarks
1	Nov2020	3 & 4	9	8	1. Introduction: Concept of Evolution, Origin of life, Origin of eukaryotic cell (Origin of mitochondria, plastids & symbionts).	8	1. Introduction: Concept of Evolution, Origin of life, Origin of eukaryotic cell (Origin of mitochondria, plastids & symbionts).	Nil	---
2	Dec 2020	1& 2	12	8	2. Evidences of Evolution: Analogy and Homology, Embryological Evidences of Evolution, Evolutionary & Paleontological. Evidences 3. Historical Review of Evolutionary Concept: Theories of Evolution, Lamarckism, Darwinism and Neo Darwinism.	10	2. Evidences of Evolution: Analogy and Homology, Embryological Evidences of Evolution, Evolutionary & Paleontological. Evidences 3. Historical Review of Evolutionary Concept: Theories of Evolution, Lamarckism, Darwinism and Neo Darwinism.	Nil	---
3	Dec 2020	3 & 4	11	7	Mutation Theory, Modern Synthetic theory. 4. Sources of Variations: Variation and Mutations 5. Isolation 6. Speciation: Types of speciation (Allopatric & Sympatric), Mechanism of speciation, Patterns of speciation.	8	Mutation Theory, Modern Synthetic theory. 4. Sources of Variations: Variation and Mutations 5. Isolation 6. Speciation: Types of speciation (Allopatric & Sympatric), Mechanism of speciation, Patterns of speciation.	Nil	---

4	January 2021	1 &2	11	8	Factors influencing speciation. 7 Population Genetics: Hardy-Weinberg Law & Genetic Drift, Types of Natural Selection.	8	Factors influencing speciation. 7 Population Genetics: Hardy-Weinberg Law & Genetic Drift, Types of Natural Selection.	1	Extra lecture was conducted
5	January 2021	3 & 4	12	8	8 Origin of Man: Evolution of Man (Evolution of anthropoids including man) - Kenyapithecus to Homo sapiens. 9 Zoogeographical Realms With reference to fauna 10 Extinctions: Extinction - An Overview.	8	8 Origin of Man: Evolution of Man (Evolution of anthropoids including man) - Kenyapithecus to Homo sapiens. 9 Zoogeographical Realms With reference to fauna 10 Extinctions: Extinction - An Overview.	1	Extra lecture was conducted

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Name of the teacher: Prof. Gunvare K.D. Year: 2019-20 Semester: VI

Subject: Environmental impact assessment Paper: - Class: T 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	Remarks
1	Nov2020	3 & 4	9	8	Environment: Definition, Divisions, Importance. 2. Pollution: Definition and types, Impact on wildlife, natural resources, development.	8	Environment: Definition, Divisions, Importance. 2. Pollution: Definition and types, Impact on wildlife, natural resources, development.	Nil	---
2	Dec 2020	1& 2	12	8	3. Sustainable development: Definition and need, Exploitation of natural resources, Concept of carrying capacity, Three pillars of Sustainability, UN 17 Sustainable Development Goals (SDGs). 4. Overview of Environmental Protection acts: The Air (Prevention and Control of Pollution) Act 1981.The Water (Prevention and Control of Pollution) Act 1974.	10	3. Sustainable development: Definition and need, Exploitation of natural resources, Concept of carrying capacity, Three pillars of Sustainability, UN 17 Sustainable Development Goals (SDGs). 4. Overview of Environmental Protection acts: The Air (Prevention and Control of Pollution) Act 1981.The Water (Prevention and Control of Pollution) Act 1974.	Nil	---
3	Dec 2020	3 & 4	11	7	The Environment Protection Act 1986, The National Green Tribunal Act 2010, Biological Diversity Act 2002. 5. Environmental Impact Assessment (EIA): Definition, need and importance of EIA, EIA notification 2006 - key elements, History and Evolution of EIA, Categories of Industries / establishments requiring EIA, Types of EIA - strategic EIA, regional EIA,	8	The Environment Protection Act 1986, The National Green Tribunal Act 2010, Biological Diversity Act 2002. 5. Environmental Impact Assessment (EIA): Definition, need and importance of EIA, EIA notification 2006 - key elements, History and Evolution of EIA, Categories of Industries / establishments requiring EIA, Types of EIA - strategic EIA, regional EIA,	Nil	---

					sectoral EIA, project level EIA and life cycle assessment, Rapid and comprehensive EIA.		sectoral EIA, project level EIA and life cycle assessment, Rapid and comprehensive EIA.		
4	January 2021	1 &2	11	8	6. EIA Process: Screening, Scoping and consideration of alternatives, Baseline data collection, Impact analysis, Mitigation, Reporting, Public hearing, Review of EIA, Decision-making, monitoring clearance conditions. 7. Stakeholders in EIA process: Project proponent, Environmental consultant. CPCB / MPCB, Public, EIA agency (IAA).	8	6. EIA Process: Screening, Scoping and consideration of alternatives, Baseline data collection, Impact analysis, Mitigation, Reporting, Public hearing, Review of EIA, Decision-making, monitoring clearance conditions. 7. Stakeholders in EIA process: Project proponent, Environmental consultant. CPCB / MPCB, Public, EIA agency (IAA).	Nil	---
5	January 2021	3 & 4	12	8	8. Overview of Scheme for Accreditation of EIA Consultant Organizations (NABET / QCI): Eligibility and benefits, EIA coordinator (EC), Functional area experts (FAEs), Functional area associate (FAA) and team members: Role, educational qualification, experience and functions.	8	8. Overview of Scheme for Accreditation of EIA Consultant Organizations (NABET / QCI): Eligibility and benefits, EIA coordinator (EC), Functional area experts (FAEs), Functional area associate (FAA) and team members: Role, educational qualification, experience and functions.	Nil	---

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