Lesson Plan

Mehr Chand Mahajan DAV College for Women, Sector – 36A, Chandigarh Monthly Teaching Plans- Odd Semester (Semester-I) Session – 2019-20

Department- Zoology

Names of the Teachers- Ms. Divya Sharma (Sec.-A) Ms. Kadambari Pathania (Sec.-B)

Class- B.Sc. I (Medical)

Sections- A & B Subject- Zoology

Paper-I: Biodiversity & Cell Biology-I (ZOO-101)

| Month | Date | | Topics to be Covered | Academic Activity |
|--------------|----------------|----------------------|---|---|
| | From | To | _ | Undertaken |
| July | 23.07.2019 | 31.07.2019 | Organization of Cell - Concept of Prokaryotic and Eukaryotic cell, extra nuclear and nuclear organization of cell. | Lecture method, PPT |
| August | 01.08.2019 | 31.08.2019 | Detailed study of the following protozoan types: Amoeba, Paramecium and Plasmodium. Classification up to orders with ecological notes and economic importance (if any) of the following: Entamoeba, Trypanosoma, Giardia, Noctiluca, Eimeria, Opalina, Vorticella, Balantidium and Nyctotherus. Methods in Cell Biology - Principles and applications of light (simple, compound & phase contrast) and electron (SEM & TEM) microscopes Fixation & fixatives, staining techniques (simple and double staining). | Lecture method, PPT Practical demonstration using Museum specimens |
| Departmental | Meeting to Coo | rdinate and Revi | ew the Monthly completion of Syllabus a | s per lesson plans on 03.09.1 |
| September | 01.09.2019 | 30.09.2019 | Detailed study of the following animal types: Sycon | Lecture method, PPT, Practical demonstration using Museum specimens |
| | | | Classification up to orders with ecological notes and economic importance (if any) of the following: Grantia, Euplectella, Hyalonema and Spongilla. | |

| October | 01.10.2019 | 31.10.2019 | Detailed study of the following animal types: Obelia Classification up to orders with ecological notes and economic importance (if any) of the following: Hydra, Sertularia, Plumularia, Obelia, Tubularia, Bougainvillea, Porpita, Velella, Physalia, Rhizostoma, Millipora, Aurelia, Alcyonium, Tubipora, Zoanthus, Metridium, Madrepora, Favia, Fungia and Astrangia. MST | Lecture method, PPT, Practical demonstration using Museum specimens |
|----------|------------|------------|--|---|
| November | 01.11.2019 | 30.11.2019 | Endoplasmic reticulum - Structure, types, associated enzymes and functions Mitochondria - Structure, mitochondrial enzymes and the role of mitochondrial DNA. Golgi complex - Structure, associated enzymes and functions. Plasma membrane - Structure with particular references to Fluid Mosaic Model, Osmosis, active and passive transport, endocytosis and exocytosis. | Lecture method, PPT and group discussion |

Lesson Plan

Mehr Chand Mahajan DAV College for Women, Sector – 36A, Chandigarh Monthly Teaching Plans- Even Semester (Semester-II) Session – 2019-20

Department- Zoology

Names of the Teachers- Ms. Divya Sharma (Sec.-A) Ms. Kadambari Pathania (Sec.-B)

Class- B.Sc. I (Medical)

Sections- A & B Subject- Zoology

Paper–I: Biodiversity & Cell Biology-I (ZOO-201)

| January 9.01.2020 31.01.2020 Detailed study of the following animal type: Arthropoda – Periplaneta Social organizations in insects (honey bee and termite). Practical demonstration usin mortance (if any) of the following: Arthropoda: Apis, Lepisma (Silver Fish), Schistocerca (Locust), Poecilocerus (Ak grasshopper) Gryllus (Cricket), Mantis (Preying Mantis), Cicada, Forficula (Earwig), Cimex, carabaeus (Dung beetle), Agrian (Dragon fly), Odontotermes (Termite queen), Cimex (Ded bug), Cicindela (Tiger beetle), Polistes (Wasp), Bombyx (Silk moth). | Month | Date | | Topics to be Covered | Academic Activity |
|--|--------------|----------------|-----------------|---|--------------------------------|
| animal type: Arthropoda – Periplaneta Social organizations in insects (honey bee and termite). Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 01.02.2 February 01.02.2020 28.02.2020 Classification upto orders with brief ecological note and economic importance (if any) of the following: Arthropoda: Apis, Lepisma (Silver Fish), Schistocerca (Locust), Poecilocerus (Ak grasshopper) Gryllus (Cricket), Mantis (Preying Mantis), Cicada, Forficula (Earwig), Cimex, carabaeus (Dung beetle), Agrian (Dragon fly), Odontotermes (Termite queen), Cimex (bed bug), Cicindela (Tiger beetle), Polistes (Wasp), Bombyx (Silk moth). Nutrients - Biogeochemical cycles & concept of limiting factors. Ecological - Morphological, physiological and behavioral adaptations in animals in different habitats. | | | | Topics to se covered | |
| February O1.02.2020 Classification upto orders with brief ecological note and economic importance (if any) of the following: Arthropoda: Apis, Lepisma (Silver Fish), Schistocerca (Locust), Poecilocerus (Ak grasshopper) Gryllus (Cricket), Mantis (Preying Mantis), Cicada, Forficula (Earwig), Cimex, carabaeus (Dung beetle), Agrian (Dragon fly), Odontotermes (Termite queen), Cimex (bed bug), Cicindela (Tiger beetle), Polistes (Wasp), Bombyx (Silk moth). Nutrients - Biogeochemical cycles & concept of limiting factors. Ecological - Morphological, physiological and behavioral adaptations in animals in different habitats. | January | 9.01.2020 | 31.01.2020 | animal type: Arthropoda – <i>Periplaneta</i> Social organizations in insects | Online resource (Digi Frog |
| ecological note and economic importance (if any) of the following: Arthropoda: Apis, Lepisma (Silver Fish), Schistocerca (Locust), Poecilocerus (Ak grasshopper) Gryllus (Cricket), Mantis (Preying Mantis), Cicada, Forficula (Earwig), Cimex, carabaeus (Dung beetle), Agrian (Dragon fly), Odontotermes (Termite queen), Cimex (bed bug), Cicindela (Tiger beetle), Polistes (Wasp), Bombyx (Silk moth). Nutrients - Biogeochemical cycles & concept of limiting factors. Ecological - Morphological, physiological and behavioral adaptations in animals in different habitats. | Departmental | Meeting to Coo | rdinate and Rev | iew the Monthly completion of Syllabus a | s per lesson plans on 01.02.20 |
| regulation of population. Departmental Meeting to Coordinate and Review the Monthly completion of Syllabus as per lesson plans on 05.03.2 | | | | ecological note and economic importance (if any) of the following: Arthropoda: Apis, Lepisma (Silver Fish), Schistocerca (Locust), Poecilocerus (Ak grasshopper) Gryllus (Cricket), Mantis (Preying Mantis), Cicada, Forficula (Earwig), Cimex, carabaeus (Dung beetle), Agrian (Dragon fly), Odontotermes (Termite queen), Cimex (bed bug), Cicindela (Tiger beetle), Polistes (Wasp), Bombyx (Silk moth). Nutrients - Biogeochemical cycles & concept of limiting factors. Ecological - Morphological, physiological and behavioral adaptations in animals in different habitats. Population - Characteristics and regulation of population. | |

| March | 01.03.2020 | 31.03.2020 | Detailed study of the following animal type: Arthropoda - Prawn Life cycle of Anopheles and Culex Classification upto orders with brief ecological note and economic importance (if any) of the following: Peripatus, Prawn, Lobster, Cancer (Crab), Sacculina, Eupagurus (Hermit crab), Lepas, Balanus, Julus (Millipede), Scolopendra (Centipede), Palamnaeus (Scorpion), Aranea (Spider) and Limulus (King crab). | Lecture method, PPT, Practical demonstration using Museum specimens |
|--------------------|----------------|-----------------|---|---|
| Departmental | Meeting to Coo | rdinate and Rev | MST view the Monthly completion of Syllabus a | s per lesson plan on 02.04.20 |
| April Departmental | 01.04.2020 | 18.04.2020 | Ecology - Subdivisions and Scope of ecology. Ecosystem - Components, ecological energetics, food web, introduction to major ecosystems of the world. Ecological factors - Temperature, light and soil as ecological factors. Revision and Class test | Lecture method, Group discussion and PPT |