Curriculum Plan

Dr. Tarkeshwar

B.Sc. (H) Zoology, VII Semester, IV Year Paper: DSE_Applied Entomology Month-wise plan for Theory

Period Assigned: Theory 01,

Paper shared with: Dr. Priyanka Dahiya, Mr. Gulshan Yadav

| Month | Week- | Unit | Topic to be covered |
|-----------|---|---|---|
| | wise | | • |
| | Dates | | |
| August | 1 ^{st-} 3 rd | Unit 1: Exploring the Fascinating world of Insects. | Overview of the economic importance of insects |
| | week | | Beneficial insects (Honey bees, Silkworm, Lac insect, ecosystem service providers: flesh flies, dung beetles, termites); |
| | 4 th -5 th week | | • Insect pests of agricultural crops, stored grains, medical and household; |
| | | | • Insects as forensic agents: role of insects/arthropods in criminal investigation by predicting time and cause of death. |
| September | 1st-2nd | Unit 3: Bionomics | Pest, Pest Status |
| | | of Insect Pests of | • Economic threshold (ET) |
| | | Agricultural Crops | Economic injury level (EIL) |
| | | and Stored grains | Classification of pests |
| | 2 nd week | Unit 2: Co- evolution of insects and plants | Insect-plant relationships |
| | 3 rd - 4 th week | | Insect-plant relationships |
| October | 1st -2nd | Unit 2: Co- | Mechanisms of insect resistance in plants |
| | week | evolution of insects and plants | Assignments allotment and presentations |
| | 3 rd week | | Tri-trophic interactions |
| November | 2 nd -3 rd | Unit 5: Pest | Integrated Pest Management (IPM) |
| | week | Management | Integrated Vector |
| | | Methods | Management (IVM). |
| | 4 th week | | Assignments, Test, Revision |

Curriculum Plan Dr. Tarkeshwar

B.Sc. (H)/B.A. (H) GE Zoology, V Semester, III Year Paper: Concept of Animal Behaviour Month-wise plan for Practical

Assigned: Practical, 2 Period

| Month | Weekly schedule | Practical Exercise to be covered |
|-----------|---|---|
| | 1 st week | Introduction to the course, curriculum and work plan |
| August | 2 nd week | Introduction to insect, insect pest, insect morphology, insect order |
| | 3 rd | Visit to an Insect rearing/culture research lab |
| | 4 th - 5 th week | Study of life history stages of insect pests of medical and household importance - Mosquitoes (Anopheles, Culex, Aedes) |
| September | 1 st week | Study of life history stages of insect pests of medical and household importance - lice, sand fly, flea, house fly, cockroach |
| | 2 nd week | Study of life history stages of hemimetabolous and holometabolous insect |
| 1 | $3^{rd}-4^{th}$ | Rearing of life cycle stages and details of hemimetabolous and |
| | week | holometabolous insect, their biology, economic |
| | | importance, and appropriate pest management method |
| | 1st week | Estimation of LD50 and LC50 of insecticides using mosquito |
| October | | larvae/ given data. |
| | 2 nd week | Visit to field to study different insect pests |
| | 3 rd week | Pesticide residue analysis of contaminated soil/vegetable/water samples using TLC. |
| | 1 st - 2 nd | Revision |
| | week | |
| November | 3 rd -4 th | Practical examination |
| | week | |