**COURSE OUTCOMES**

**B.Sc - Zoology IIIrd year**

**Semester- V**

**Subject-** **Aquaculture And Pest Management-1 (Theory+Practical)**

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| **Co 1** | Knowledge of the marine fisheries of the world with description of the quantity captured and consumed with the techniques. Detailed account of EEZ (World & India). |
| **Co 2** | Theoretical knowledge of Ganga, Brahmaputra and Indus river systems with examples of fauna found and captured. Concept of cold water fisheries of World and India. |
| **Co3**: | Description of the process in Brackish water culture of fin fishes, mollusks and crustaceans. |
| **Co4** | Identification of the types beaks and feet of the birds and various economically important fishes. |
| **Co5** | Theoretical and practical knowledge of various pests of food crops and their identification with features. |
| **Co6**. | Study of life history, systematic positions, damage caused and control of pests of sugarcane, wheat, paddy and vegetables. |
| **Co7** | Theoretical and practical knowledge of artificial breeding, rearing and techniques of aqua culture through visit to fish farm. |

**Subject- Environmental Science (Theory+Practical)**

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| **Co 1** | Concept of habitat and ecological niche and explanation with examples of the abiotic and biotic factors. |
| **Co 2** | Theoretical knowledge of the major ecosystems of the world. Explanation of the various components of the ecosystem,food web and food chain. |
| **Co3**: | Practical knowledge of preparation with precaution of histological slides of mammals. methods of microtomy with knowledge of working of the microtome, hot plate, incubator etc. |
| **Co4** | Description of biogeochemical cycles. Explanation of the cyclic pathways through which chemical elements move from the environment to organisms and back |
| **Co5** | Theoretical knowledge of causes of elevation in population, growth curves, factors that determine growth rate and reproductive health and methods to control it |
| **Co6**. | Explanation of biodiversity and its conservation. Steps taken by the government to save plants and animals. Knowledge of the natural resources of the world . |
| **Co7** | Theoretical knowledge of the reasons of migration of fishes and birds. Concept of Parental Care in various species of animals |
| **Co8** | Theoretical and practical knowledge of types of pollution, their causes, hazardous effects on steps taken by government .concept of global warming the environment. What are the |

**CREDITS**- 3 **THEORY PERIODS OF EACH PAPER OF 45 MINUTES EACH PER WEEK OVER A SEMESTER**

**6 PRACTICAL PERIODS OF 45 MINUTES EACH PER WEEK OVER A SEMESTER**

**B.Sc - Zoology IIIrd year**

**Semester- VI**

**Subject-** **Evolution And Developmentl Biology (Theory+Practical)**

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| **Co 1** | Details about facts of universe, origin of solar system, earth and conditions on primitive earth and theories of origin of life, Miller Experiment. |
| **Co 2** | Describe theories of evolution of Lamarkism , Darwinism , Mutualism , and Neo- Darwinism theory |
| **Co3**: | Study the phylogeny of horse and man. |
| **Co4** | Explain two types of gametogenesis one is spermatogenesis and second is oogenesis , structure of sperm and ovum , types of egg |
| **Co5** | Study the site of fertilization and mechanism of fertilization involves approach of spermatozoan to ovum and their significance . |
| **Co6**. | **:** Explain the characterstics of cleavage , planes , pattern , products and rate of cleavage . blastulation and types of blastula. |
| **Co7** | **:** Describe the development of frog and chick, study of gametes and life cycle of frog and chick development . |

**Subject-** **Aquaculture And Pest Management-1I (Theory+Practical)**

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| **Co 1** | Describe the fish seed production and fish feed |
| **Co 2** | Illustrate about different type of technique of fish culture and latest technology for fish breeding. |
| **Co3**: | Explaine the different type of stored grain pest with their control damage and precaution. |
| **Co4** | Study the biological and chemical control of pest*.* |
| **Co5** | Describe different type of metod of controlling insect pest in integrated pest mamagement |
| **Co6**. | Study different species of bird and rodents can control pest. |

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