

LS-104—Animal Biology [2 Credits]**Prof. Deepak Sharma* & Dr. Sushil Kumar Jha**

| Sl. no. | Topic | Name of the Faculty | No. of lectures |
|---------|---|---------------------|-----------------|
| 1 | Origin and Evolution of Life: Theories of the origin of life, early earth, modern self-assembly theories, Oparin Haldane theory of chemical evolution, The Miller-Urey experiment, Organic evolution, Development of evolution theory, Darwin's theory, Origin and evolution of human being. | SKJ | 4 |
| 2 | Natural selection: The nature of natural selection, Examples of natural selection, levels of selection, selection of organisms and groups, species selection. Artificial selection, Adaptation: The nature of adaptations, Speciation | SKJ | 3 |
| 3 | Animal Diversity, Animal Kingdom, Animal Classification,: Basis of classification, levels of organization (Symmetry, diploblastic and triploblastic organization), Coelom, segmentation, Notochord, | SKJ | 3 |
| 4 | Characteristic features of each Phyla: Protozoa, Porifera, Cnidaria, Platyhelminthes, Nematodes, Annelida, Arthropoda, echinodermeta, hemichordata, chordata, | SKJ | 3 |
| 5 | Structural organization in Animals: Animals Tissues: Epithelial Tissue, connective Tissue, Muscle Tissue, Neural Tissue, | SKJ | 3 |
| 6 | Organ system with reference to : Integumentarysystem, Muscular and Skeletalsystem, Digestivesystem, respiratorysystem, Circulatorysystem, Excretorysystem, nervoussystem, Sensory and Reproductivesystems. | DS | 16 |

Total lectures: 32 ± 2