## BRIDGE COURSE ZOOLOGY- 2021-22

**Aim** - With a view to enhance the knowledge in subjects we frame a bridge course to first semester of B.sc programme students.

**Objective-** The bridge course aims to act as a buffer for the fresher's with an objective to provide adequate time for the transition to degree courses. This course provides a better transition phase to prepare themselves before the onset of courses for first semester. It also helps to develop process-skills and experimental, observational, manipulative, decision making and investigatory skills in the learners.

**Design-** The course consists of interactive sessions and with oral question answer session for evaluation designed by the Zoology department which is compulsory for all students.

**Duration-** 6 Days in month of July

Time - Monday to Saturday

Syllabus-

Unit 1: Systematic and binomial system of nomenclature: meaning of the terms taxonomy, systematic, classification and nomenclature, Need of classification. Systematics: Kingdom Protista- Salient features, examples; Kingdom Animalia-Introduction to different Phyla: Protozoa, Porifera, Coelenterata, Platyhelminthes, Aschelminthes, Annelida, Arthropoda, Mollusca, Echinodermata, Hemichordata and Chordata (Protochordata, Pisces, Amphibia, Reptilia, Aves & Mammals)

**Unit 2: Physiology and Biochemistry:** Introduction to organ systems-Digestive, Respiratory, Circulatory, Nervous, Endocrine and Reproductive system. Modern concept of gene: DNA as genetic material, structure of DNA as given by Watson and Cricks model, RNA: General structure Cell: Brief Explanation-Mendel and his experiments, Cell Organelles. Biodiversity: Biodiversity and Causes of Biodiversity Losses, Biodiversity Conservation Environmental issues: Air pollution and its control, water pollution and its control.

**Unit 3: Applied Zoology:** Applications of Zoology in various applied fields like Aquaculture, Entomology (Sericulture, Apiculture, Lac culture) Vermicomposting.

**Note - Exam and Internal Assessment Patterns:** University Pattern of Examination, especially difference between annual and semester, Internal assessment marks and Practical marks, Unit test, Project, tour etc. also covered in the course.

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