

## ZO502 CELL AND MOLECULAR BIOLOGY

---

Programme: Master of Science Zoology MSCZO12

Year / Semester: 1st Year

Credits: 6

### **BLOCK – I: CELL BIOLOGY**

Unit –1 : An overview of the Cell, Cell shapes and types

Unit –2 : Methods in Cell Biology

Unit –3 : Structures and Functions of the Cell Membranes

Unit –4 : Functional aspects of Cell Organelles

Unit –5 : The Cell Organelles

Unit –6 : Nucleus

Unit –7 : Cell Division

Unit –8 : Cell Communication and Signaling

### **BLOCK–II:MOLECULAR BIOLOGY**

Unit –9 : Nucleic Acids

Unit –10 : DNA Replication

Unit –11 : Transcription

Unit –12 : Genetic Code and Protein Synthesis

Unit –13 : Gene Regulation

Unit –14 : Gene Transfer methods in Prokaryotes

Unit –15 : Mobile Genetic Elements

Unit –16 : Cancer