

Sub: Biotechnology 1st Sem

Title: Cell Biology and Genetics

UNIT-I

- INTRODUCTION AND HISTORY OF BIOTECHNOLOGISTS SCIENCE WITH SPECIAL REFERENCE TO CONTRIBUTIONS OF INDIAN SCHOLARS
- CELL ,CELL THEORY AND DIVERSITY OF CELL SIZE AND SHAPE

UNIT-II

- STRUCTURE AND FUNCTION OF MITOCHONDRIA
- STRUCTURE AND FUNCTION OF CHOLOROPLAST

UNIT-III

- CELL CYCLE,MITOSIS AND MEIOSIS
- CHROMOSOMES
- STRUCTURE OF DNA

UNIT-IV

- MENDELIAN GENETICS: MONOHYBRID & DIHYBRID CROSSES
- PRINCIPLES OF DOMINACE INDEPENDENT ASSORTMENT SEGREGATION INCOMPLETE AND CO DOMINANCE
- LINKAGE

Sub: Biotechnology 3rd Sem

Title: Biochemistry and Biochemical Tools

UNIT-I

- STRUCTURE, FUNCTION AND PROPERTIES OF AMINO ACIDS
- TYPES OF PROTEINS AND THEIR CLASSIFICATION

UNIT-II

- STRUCTURE, FUNCTION AND PROPERTIES OF CARBOHYDRATES
- STRUCTURE, FUNCTION AND PROPERTIES OF LIPIDS

UNIT-III

- PRINCIPLES, WORKING AND APPLICATIONS OF CENTRIFUGATION
- PRINCIPLES, WORKING AND APPLICATIONS OF CHROMATOGRAPHY

UNIT-IV

- PRINCIPLES, WORKING AND APPLICATIONS OF X-RAY DIFFRACTION
- PRINCIPLES, WORKING AND APPLICATIONS OF SPECTROSCOPY

