

CELL BIOLOGY

Unit – I

Prokaryotic and Eukaryotic cell – Plasma membrane – Structure and function – Transport across the Plasma membrane.

Unit – II

Nucleus and Nucleolus – Structure of Chromatin - Cell division.

Unit – III

Structure and function of Mitochondria – Respiration – Structure and function of chloroplast – Carbon dioxide fixation pathways.

Unit – IV

Endoplasmic reticulum - Golgi apparatus - Lysosomes

Unit – V

Ribosomes - Protein synthesis – RNA types - Post Translational modification of Proteins.

Unit – VI

DNA as the genetic material – Gene concept – Gene regulation.

Suggested Readings

1. Cell Biology – Rastogi (2002)
2. Cell and Molecular Biology – De Roberties (2000)
3. Molecular Biology of the Cell – B. Alberts et al (2000)