

Vidya Bhawan Balika Vidyapeeth Lakhisarai

Arun Kumar Gupta

Class 11th

Sub. Biology

Date:- 28.12.20

Components of a Prokaryotic (Bacterial) Cell

A bacterial cell is composed of various components as genetic material, cell envelope, cytoplasm, nucleoid, inclusion bodies, ribosomes, flagella, pili, fimbriae, etc.

Genetic Material

Nucleoid represents the genetic material in case of prokaryotes that is naked, not enveloped by a nuclear membrane. Many bacteria contain a small circular DNA known as plasmid other than the chromosomal or genomic DNA.

These plasmids confer certain unique characters to the bacteria like antibiotic resistance, sex factor, etc.

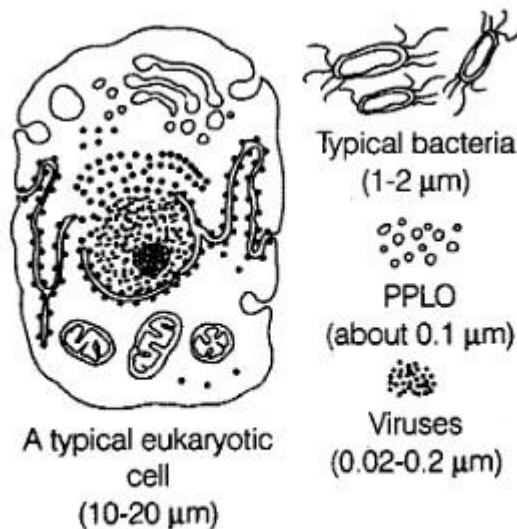


Fig. 8.2 Diagram showing comparison of eukaryotic cell with other organisms

Cell Envelope and Its Modifications

Cell envelope is the outermost covering of protoplasm of the bacterial cell. It is known to protect the cell from mechanical shocks and injuries.

It is composed of following three layers, which perform specialised function