

BACTERIAL CELL STRUCTURE

Essential

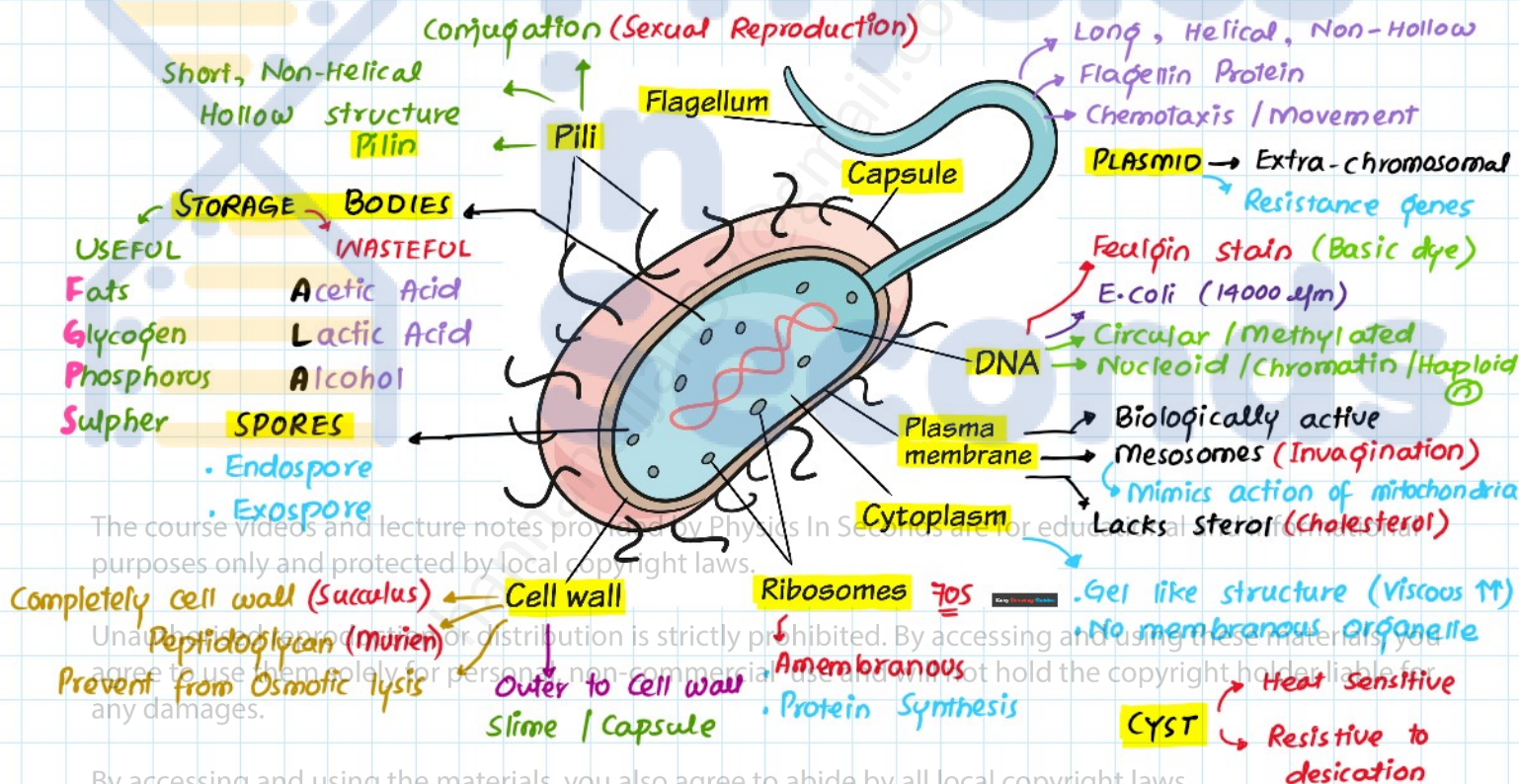
- Cell Membrane
- Cytoplasmic matrix
- Ribosomes
- Nuclear material

Mostly Found

- Cell Wall
- Plasmid

Rarely

- Slime / capsule
- Flagella
- Pili
- Fimbriae



MACROMOLECULES → **CELL ENVELOPE** → Outer to Cell Membrane

- | | | |
|--|---|---|
| Cell wall
Peptidoglycan
Shape maintenance | Slime → loose, soluble
Lipoprotein
Pathogenicity / virulence | Capsule → tightly bound
Proteineous
Encapsulation / colony |
|--|---|---|

P^o-dye

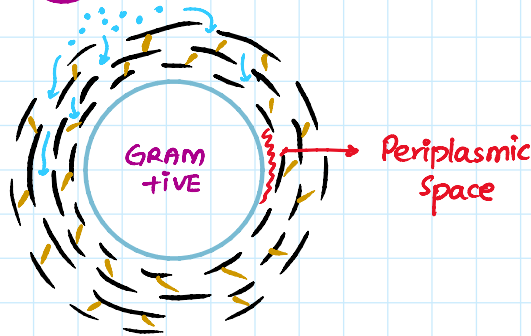
(CV) + I → Purple

S^o-dye

Safranin + I₂ → Pink colour

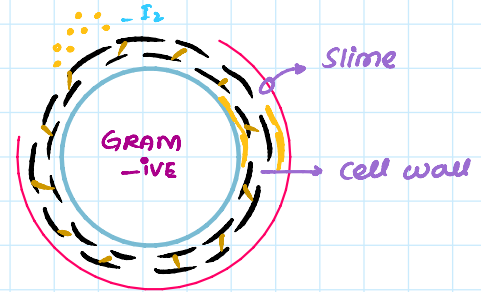
P^o-Dye

(CV) + I → Purple



S^o-dye

Safranin + I₂ → Pink colour



1

↑↑

↓↓

Rarely

↓↓

(50%) ↑↑

Broad Spectrum

LAYERS

PERMEABLE

RESISTIVE

PERIPLASMIC SPACE

LIPID

PEPTIDO - GLYCAN

ANTI- BIOTICS

2

↓↓

↑↑

Always

↑↑

↓↓ (10%)

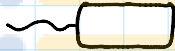
Narrow Spectrum

FLAGELLA → Trichous

→ Cocci rarely have flagella



Atrichous



Monotrichous



Bi-Polar monotrichous



Lophotrichous



Amphitrichous

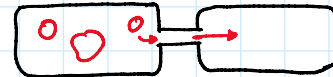


Peritrichous

PILI → True Pili (Gram -ive)

F⁺

F⁻



CONJUGATION

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