

**Q1) One of the following is not function of cytoplasmic membrane**

A) Respiration & Reproduction

B) Staining affinity

C) Selective transport

D) Cell wall biosynthesis

## Q2) Mesosomes are:

- A) Type of ribosome
- B) A part of cell wall
- C) Sites of respiratory enzymes
- D) Type of genetic material

## Q4) One of the following is not character of Plasmids

A) Extra dsDNA

B) Carry genes essential for growth

C) Carry genes for drug resistant

D) Replicate autonomously

**Q2) The following organisms has a nuclear membrane**

A) Fungi

B) Virus

C) Bacteria

D) Prion

**Q3) All of the following are characters of Bacterial ribosome EXCEPT:**

A) Site of protein synthesis

B) 70S

C) 80S

D) Target for antibiotic action

**Q1) A prokaryotic organism has no**

A) Cell membrane

B) Cell wall

C) Mesosomes

D) Nuclear membrane

**Q3) One of the following is NOT character of viruses**

A) Small size

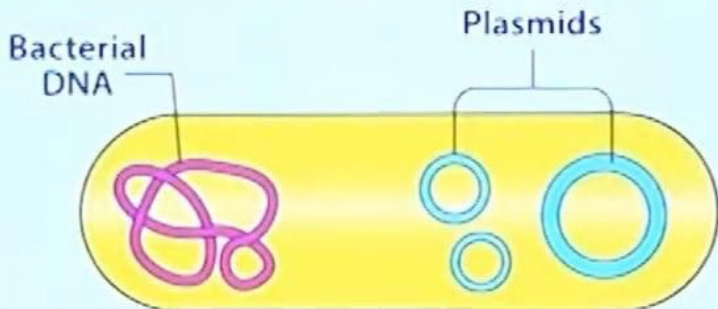
B) Obligate intracellular

C) They are prokaryotic

D) They have no cell structure

## Exercise

Is penicillin destroy the complete bacterial cell?



No

Action of antibiotic when bacteria divided



**Q1) Lipid A is a cell wall component of:**

A) Gram positive bacteria

B) Fungi

C) Viruses

C) Gram negative bacteria

**Q2) One of the following is a function of cell wall**

Maintain the shape

Selective transport

Protein synthesis

Excretion of extracellular enzymes

**Q3) Mycoplasma resist to penicillin due to lack**

Ribosome

Cell wall

Cell membrane

Pili

## Harvesting Questions

Q4) The following is a feature of Gram +ve rather than Gram-ve cell wall

A) Lipid A

B) Outer membrane

C) Thick peptidoglycan

D) Periplasmic space

## Exercise

	Pili	Flagella
1) Structure	Short & Thin	Long & Thick
2) Nature	Protein (Pilin)	Protein (Flagellin) H Ag
3) Distribution	Around organism	Mono - Peri
3) Function	*Attachment *Conjugation	Movement (+/-)

## Exercise

	Short Pili	Sex pilus
1) Arrangement	Numerous	Single
2) Tall	Short	Long
3) Function	Attachment to host cell (Infection)	Attachment to bacterial cell for gene transfer

# Harvesting Questions

## Q1) Bacterial capsule:

- A) It's organ of movement
- B) Makes the organism easily phagocytosed
- C) It's an important virulence factor
- D) It's usually polypeptide

## Harvesting Questions

Q2) One of the following is not about Bacterial spore

- A) Spores are resistant to boiling
- B) B. chromosome is not present in the spore
- C) Are metabolically inactive
- D) Formed only by *Bacillus & clostridium*



## Harvesting Questions

### Q3) Structures for attachment

A) Fimbriae (pili)

B) Cell wall

C) Capsule

D) Fimbriae (pili & Capsule)

## Harvesting Questions

**Q4) Bacteria are protected from phagocytosis by:-**

A) Capsule

B) Peptidoglycan

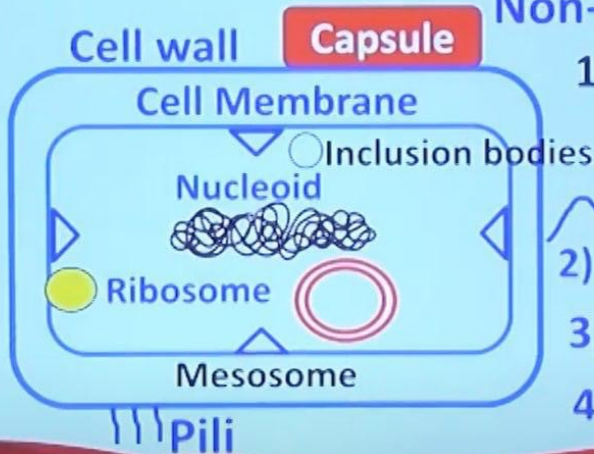
C) Mesosomes

D) Flagella

# Harvesting Questions

## Essential

- 1) Nucleoid
- 2) Cell Membrane
- 3) Ribosome
- 4) Cell wall



## Non-essential

- 1) Capsule
- 2) Flagellum
- 3) Pili
- 4) Plasmid

## Exercise-2

Why obligate anaerobes bacteria die in the presence of  $O_2$ ?

$O_2$   superoxide and  $H_2O_2$

No superoxide dismutase & catalase

**Bacteria will die**

## Exercise-3

What is the type of bacteria that Synthesis organic compounds from nonorganic compounds?

- a) Hetrotrophic
- b) Obligate anaerob
- c) Aerobes
- d) Facultative anaerobes
- e) Autotrophic

## Exercise-4

What is the following term best describes bacteria that lack superoxide dismutase and catalase?

- a) Obligate aerobes
- b) Obligate anaerob
- c) Aero-tolerant anaerobes
- d) Faculataive anaerobes
- e) Microaerohhilcs

## Exercise-5

What is the following term best describes bacteria that lack catalase but not superoxide dismutase?

- a) Obligate aerobes
- b) Obligate anaerobes
- c) Facultative anaerobes
- d) Micro-aerophilic
- e) Aero-tolerant anaerobes

## Exercise-6

Cabnophinic bacteria required

- a) Low concentration of O<sub>2</sub>
- b) High concentration of O<sub>2</sub>
- c) Low concentration of CO<sub>2</sub>
- d) High concentration of CO<sub>2</sub>
- e) High alkaline of pH



## Exercise-1

	Conjugative plasmid	Non- Conjugative plasmid
4) Sex pilus	Present	Absent
5) Transfer by	Conjugation	By Help Conjugative plasmid
6) Replication	depend on protein synthesis	not depend

## Exercise-2

One of the following is not function of plasmids

- Sex pilus
- Growth & survive
- Bacteriocin production
- Antibiotic resistance
- Virulence

## Phenotypic

- Environmental change
  - Reversible
  - Not-heritable
- e.g. Loss of cell wall  
in L-form bacteria

## Genotypic

- Genetic change
  - Irreversible
  - Heritable
- e.g. Mutation  
Gene transfer

## Exercise

Transfer of DNA from bacteria to other through sex pilus is called

## Exercises

Q2) Antiseptics like disinfectants for living tissues

False

True

## Exercises

Q1) A Chemical substance that kills most pathogenic organisms but does not kill spores

- Sterilant
- Disinfection
- Disinfectant
- Cleaning