

UNIT -II : MICRO BIOLOGY

7. BACTERIA

1 x 2 =2 Marks

ROOT POINTS

1. **Bacteria** are important group of **Microbes** which are omni present.
2. Just like other living organisms, **Bacteria also take food, grow and reproduce.**
3. **Cell walls** provide **shape and protection to Bacteria.**
4. Bacteria occur in several shapes **Cylindrical** (Bacillus), **Spherical** (Coccl), **Spiral** (Spirillum).
5. Some bacteria are **parasites**, while a few form symbiotic association with plants, animals, humans.
6. **Escherichia coli** is a common inhabitant of human intestine.
7. **Saprophytic** and **Parasitic** bacteria have **biomedical importance.**
8. Bacteria are normally **reproduced** by **binary fission.**
9. **Genetic exchange** among bacteria takes place by conjugation, transformation, transduction.
10. **Bacterial plasmids** can be manipulated in the **laboratory.**
11. The self duplicating, naked, circular, double stranded DNA moles is called **Plasmid.** [IPE]
12. **Plasmids** are used as **vectors in genetic engineering technology.** [IPE]
13. The transfer of genetic material between two bacterial cells through direct contact is called **Conjugation.** [IPE]
14. The donor bacteria cell directly transfers DNA to the recipient cell. [IPE]
15. The transfer of genetic material from one bacteria to another, through bacterio phase is known as **Transduction.** [IPE]

FRUITY Qs OF IPE

1 x 2 =2 Marks

1. What are pleomorphic bacteria? Give an example.
2. What is a genophore?
3. What is a plasmid? What is its significance?
4. What is conjugation? Who discovered it and in which organism?
5. What is transformation? Who discovered it and in which organism?

SCENT BOXES- MEMORY HINTS

FOR SELECTIVE QUESTIONS

74. Name the bacteria which is a common inhabitant of human intestine. How is it used in biotechnology?

- A:** 1) Escherichia coli is a common inhabitant of human Intestine.
2) It is used in rDNA technology.

😊 SCENT BOX 😊

Having E.Coli
in my Intestine
is as common as
having Chocolates
in my Freezer

75. What are pleomorphic bacteria? Give an example.

[TS 18,20][AP 17]

- A:** 1) The bacteria which are capable of changing their shape depending on the environmental conditions, nutrition are called pleomorphic bacteria.
2) **Ex:** Aceto bacter.

😊 SCENT BOX 😊

I saw many people
changing their shades.
But first time to see
acetobacter
changing its shape

78. What is a plasmid? What is its significance?

[TS 19] [TS 17]

- A:** 1) **Plasmid:** The self duplicating, naked, circular, double stranded DNA fragments is called plasmid.
2) **Significance:** They are used as vectors in genetic engineering technology.

😊 SCENT BOX 😊

Wow!

It would be so good if my
Chocolates are having
SNCd character just like
plasmid