

Date - 19-02-2025

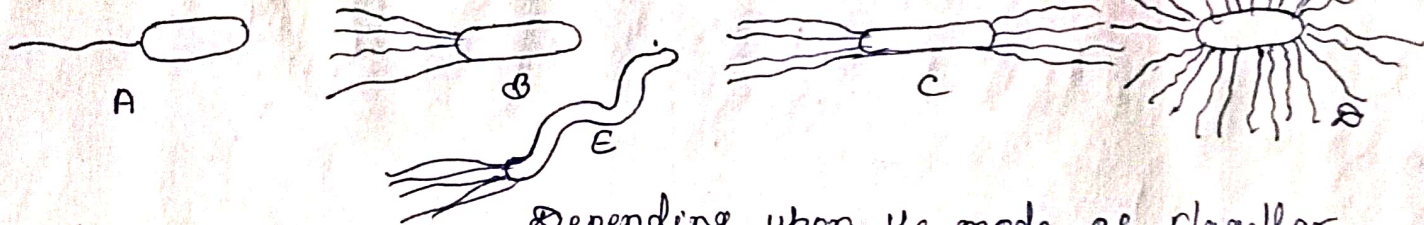
online class - J.J. College, Ara, Dr Simil Pandit.

Time - 8:30 - 9:30

Group - B. plant pathology.

Question → Write short notes on: - 1.

1. Flagellation in Bacteria → Flagella are little whip like fine structure with the help of which the microbes or bacteria make their movements. Some bacteria are non-motile which cannot move whereas some bacteria are motile which move independently with the help of their flagella. The flagella are delicate hair like structure which extend out from the body capsule either singly or in group. The flagellation is the process of attachment of flagella with the bacteria capsule.



Depending upon the mode of flagellar attachment the bacteria may be divided into following group →

(a) Monotrichous (b) Lophotrichous (c) Amphitrichous (d) Peritrichous
 (e) Atrichous (f) pilli.

2. Conjugation in Bacteria → It is a process in which transfer of genetic material (DNA) takes place from a donor cell to recipient cell of bacteria. The process was first studied by Lederberg and Tatum (1944) in *Escherichia coli*. The transfer of genetic material from donor to recipient takes place by their mutual union. The recipient strain is known as F⁻ (Female) while the donor strain is known as F⁺ (Male).

3. Bacterial Transformation → The process of transformation was studied by Fred Griffith (1928) first. According to him the donor cell is provided with a larger size free DNA fragment which is transferred to the recipient cell is integrated into genome of the recipient cell.

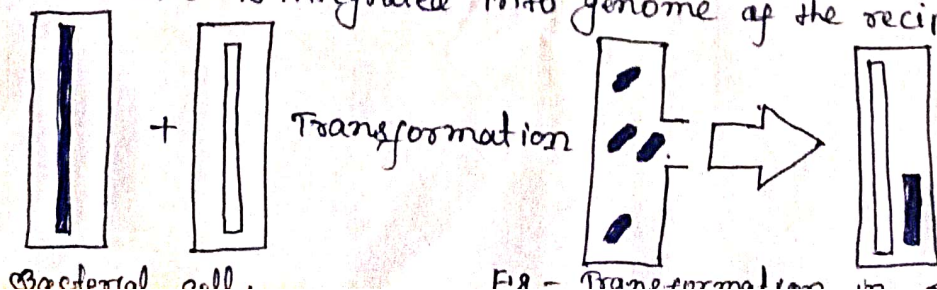


Fig - Transformation in Bacteria