Biology - FSC Part 1 Biology English Medium Chapter 6 Preparation

Q1. Write down the role of Pili in bacteria.

Ans 1: Role of Pili in bacteria are as follow: 1. They are primarily involved in a mating process between cells called conjugation process. 2. Some Pili function as a a means of attachment of bacteria to various substrates.

Q2. Name four phase of bacterial growth.

Ans 1: Four phase of bacterial growth are Lag phase, log phase, stationary phase and death or decline phase.

Q3. What is heterocyst? Give its importance.

Ans 1: All cells in trichome are most similar in structure but at intervals are found slightly large round,light yellow thick walled cells called heterocysts.
Importance: Cyanobacteria have heterocyst which are helpful in fixation of atmospheric nitrogen.

Q4. Differentiate between microbicidal and microbiostatic effect?

Ans 1: Microbicidal : Microbicidal effect is one that kills the microbes immediately.

Ans 2: Microbiostatic :Microbiostatic effects inhibit the reproductive capacities of the cells and maintain the microbial population at constant size.

Q5. What are akinetes?Give their functions.

Ans 1: Akintes are thick walled,enlarge vegetative which accumulate food and become resting cells.On the onset of favourable conditions they form normal vegetative cells.

Q6. Differentiate between Lophotrichous and Amphitrichous.

Ans 1: Lophotrichous: When tuft of flagella is present only at one people of bacteria.

Ans 2: Amphitrichous When tuft of flagella at each of two poles is present.

Q7. Write four postulates of germ theory of disease.

Ans 1: Robert Koch formulated postulates that they are the main pillars of germ theory of disease.A specific organism can always be found in association with given disease.The germ can be isolated and grown in pure culture in the lab.The pure culture will produce the disease when inoculated in the susceptible animal.It is possible to recover the organism in pure culture,from

experimentally infected animal.

Q8. Write the physical method to control the bacteria.

Ans 1: In this steam dry heat,gas,filtration and radiation are used to control bacteria.The process in which we use physical agents to control bacteria/microorganisms is known as sterilization process.Sterilization is a destruction of all life forms.

Q9. Differentiate between lag phase and log phase of growth of bacteria.

Ans 1: Lag phase: It is period of no growth. Bacteria prepare themselves for division.

Ans 2: Log phase: It is period of rapid growth. Bacteria divide at exponential rate.

Q10. What are Gram positive bacteria?

Ans 1: Gram positive bacteria stain purple (retain primary dye due to formation of CV-I complex(crystal violet-iodine.)