Extra Question

8. Useful and Harmful microbes

Q.1 What is the process to convert milk into yoghurt?
Ans.- The bacteria that convert lactose sugar in the milk to lactic acid by the process of fermentation is Lactobacilli. Hence the pH of milk decreases and become acidic. This results in coagulation of milk proteins are separated from other constituents of the milk, causing milk to convert into yoghurt. Due to lactic acid yoghurt tastes sour. The other harmful bacteria in the milk destroys the low pH.

Q.2 How is Rhizobium useful to farmers ?
Ans:- As the use of Rhizobium is increased, the chemical fertilizers are used less. Hence, the bad effects of chemical fertilizers are reduced. Due to use of Rhizobial cultures, the expenses, on the chemical fertilizers are reduced. Beans and pulses grown on the plants with use of Rhizobial cultures are rich in proteins due to nitrogenous compounds made available by Rhizobia.

Q.3 Which are the diseases spread through pathogen fungi ? State their mode of infection and preventive measures.
Ans:- The diseases spread through pathogen fungi are dandruff, ringworm, scabies. If the infected person comes in contact, or in belongings like clothes, or used things then these diseases

spread, to prevent these diseases, one should maintain personal hygiene, and avoid contact with infected person.

Q.4 Which process converts milk into yoghurt ?

Ans.- Fermentation is the process that convert milk into yoghurt. Fermentation is a bio chemical process in which carbohydrates are broken down by micro-organisms in absence of oxygen. When yoghurt is prepared, a carbohydrate that is lactose sugar is present in milk is converted into lactic acid.

Q.5 What are the uses of fungi to plants.

Ans.- 1) Certain fungi live around the roots of plants. e.g. The group of fungi called Mycorrhizia. They extract the sugar that they need from the plants, and in return fungi provide minerals and water from soil to the plants. Hence, fungi and the host plant have a symbiotic relationship. Some plants are totally dependent on fungus associated with their roots for growth. e.g. orchids.

2) Fungi growing on the fallen leaves detoxify them, that makes it safe for grazing animals that feed on those plants.

3) A group of fungi called chytrids live symbiotically in the rumen of the moose.

4) Certain species of wood wasps and some other insects lay eggs in the fungal bodies of growing trees. The developing larvae feed on the trees.

5) Some ants grow fungi in their anthill to grow food from it.