

Lesson-2 Microorganism

Q1 What are microorganisms?

A Very small organisms around us which cannot be seen with naked eyes are called microorganisms.

Q2. Where do microorganism live?

A They can survive under all types of environment ranging from ice cold climate to hot springs and desert to marshy land and they are also found inside the bodies of animals including humans.

Q3 What are pathogens?

A Disease causing microorganisms are called pathogens.

Q4 Name some diseases caused by pathogens.

A Malaria and dysentery

Q5 Name some diseases caused by bacteria.

A Typhoid and tuberculosis

Q6 Name some diseases caused by viruses .

A Cold ,flu and cough

Q 7. How is curd formed?

A Bacterium lactobacillus multiplies in milk and converts it into curd.

Q 8. Define communicable diseases.

Ans There are some diseases that can spread from an infected person to a healthy person through air water food or physical contact. These are called communicable diseases .For example common cold chicken pox and cholera etc.

Q9 How do we preserve cooked food at home?

A We preserve cooked food at home by keeping it in refrigerator.

Q 10. Is spoiling of food a chemical reaction?

A Yes, it is a chemical reaction because spoiled food has bad smell and taste and it change colour too.

Q11. What are carriers?

A The insects which transmit disease causing microorganisms to human are called carriers.

Two common careers are housefly and mosquito

Q12 .Define the process of fermentation and its application.

A The process of conversion of sugar into alcohol with the help of microorganism is known as fermentation.

The process is used to produce wine beer and acetic acid. For this purpose yeast is grown on natural sugar present in grains like barley, wheat ,rice and crushed fruit juices etc.

Q13 .Why are vaccines important?

A Vaccines produce antibodies in our body to fight against disease causing microbes entering in our body. Diseases like cholera, tuberculosis, smallpox and hepatitis can be prevented by vaccination.

Q 14. What is vaccination?

A Vaccination is a process of giving a vaccine orally or by injection which provide protection against a particular disease.

Q15. Why is yeast used in baking industry?

A For making bread cakes and pastries

Yeast reproduces rapidly and produces carbon dioxide during respiration. Bubbles of gas fill the dough and increase its volume. This is the basis of the use of yeast in baking industry.

Q16. How do microbes clean our environment?

A The microorganisms decompose the dead organic wastes of plants and animals converting them into simple substances. These substances are used by plants and animals. Thus microbes degrade the harmful substances and clean up the environment

Q17. How does housefly spread diseases?

A House flies sit on the garbage and animals excreta. Pathogens stick to their bodies. When these flies sit on uncovered food they may transfer the pathogens. Whoever eats the contaminated food is likely to get sick.

Q18. What is food poisoning? How is food poisoning caused?

A The disease caused due to the presence of large number of microorganisms in the food. Food poisoning could be due the consumption of food spoilt by some microorganisms.

Q19. Why does fungal infection not occur in jams and pickles

A The jams and pickles contain either high amount of sugar or salt which inhibits the growth of microorganisms. The fungal spores when fall on these solutions, lose their water by exosmosis into the surrounding medium.

Q 20. How does sugar act as preservatives?

A Jams jellies and squashes are preserved by sugar. Sugar reduces the moisture content which inhibits the growth of food spoiling bacteria.

Q21. How do oil and vinegar act as preservatives?

A Use of oil and vinegar prevent spoilage of pickles because bacteria cannot live or survive in such an environment. Vegetables fruits fish and meat are often preserved by this method.

Q 22. What preventive measures should be taken to prevent the spread of tuberculosis?

A The following preventive measures should be taken to prevent the spread of tuberculosis_

1. The patient should be put in complete isolation.
2. The personal belongings of the patients should be kept away from others.
- 3 They should be vaccinated.

Q 23 Write a short note on the virus.

A Viruses are special microorganisms which are positioned between the living and nonliving things. They only become active, when they enter the body of any living organisms. They are special as they are not affected by any antibiotic

Q 24. How has common salt been used as preservatives?

A Common salt has been used to preserve meat and fish for ages. Meat and fish are covered with dry salt to check the growth of bacteria. Salting is also used to preserve amla, raw mangoes and tamarind etc.

Q 25. Why should we keep a handkerchief on the nose and mouth while sneezing?

A When a person suffering from common cold sneezes the fine droplets of moisture containing thousands of viruses are spread in the air. These viruses may enter the body of healthy person while breathing, thus we should keep

handkerchief on the nose and mouth while sneezing so that viruses may not spread in air and enter into healthy person's body.

Q 26. Why a mango gets spoilt and rotten after few days but a mango pickle does not spoil for a long period of time?

A A mango gets spoilt and rotten after few days but a mango pickle does not spoil for a long period of time because mango pickles contains salt which acts as preservatives and prevent the growth of microorganisms in it.