



KALPAVRUKSHA MODEL SCHOOL

Answers Assignment-5

Class: VIII

Sub: Biology

Date: 20.07.2021

Topic: Microorganisms

I. Answer the following questions:

1. What are the two harmful effects of microorganisms?

Ans: The two harmful effects of microorganisms are:

- i. causing diseases in human beings, animals, plants.
- ii. food spoilage.

2. What are pathogens?

Ans: Microorganisms that cause disease are called pathogens.

3. Describe how pathogens are transmitted from one person to another.

Ans: Pathogens enter the body of a healthy person through air, water, and food. Eg: When a person sneezes who is suffering from common cold, release pathogens into the air. These pathogens may enter the body of a healthy person while breathing and he/she may also get common cold. Pathogens can also spread from an infected person to a healthy one through insects like the female Anopheles mosquito and housefly uncleaned places or uncovered food items etc.

3. Which microorganism causes diseases like measles, chicken pox, polio, hepatitis-B, etc?

Ans: The virus causes diseases like measles, chicken pox, polio and hepatitis-B.

4. What are communicable diseases? Name any two communicable diseases of human beings, animals, and plants.

Ans: Diseases that can spread from one person to another are called communicable diseases.

Example: Human beings: cholera, common cold, chicken pox, Typhoid etc.

Animals: Anthrax, Rinderpest etc.

Plants: Citrus canker, Apple scab etc.

5. Draw the table 2.1, 2.2 (Communicable diseases in human beings and Some animal diseases caused by pathogens).

6. Name the main conditions required for the growth of microorganisms.

Ans: The main conditions required for the growth of microorganisms are moderately warm temperature, air and moisture

7. List at least three things that help us detect that food is unfit for consumption.

Ans: We can detect food that has become unfit for consumption if they have foul smells, slimy surface or cotton like growth on the surface, sour taste and surface discolouration and gas formation.

8. What is food preservation? Describe in detail any four common methods of food preservation.

Ans: Food preservation is the process of treating and handling food with an aim to stop or slow down its spoilage while maintaining nutritional value, texture and flavor.

Method	Procedure	Examples
Boiling	boiling liquid food item to kill existing microbes & harmful microbes.	milk
Dehydration	removal of water	cereals , pulses
Refrigeration & freezing	refrigerating at low temperature	fruits , meat, vegetables.
Canning	storing food items in airtight cans	jams, fish, vegetables.

Using chemicals preservatives	sodium benzoate, potassium metabisulphite.	squashes, sherbets, ketchups
Using salt, sugar, oil, or vinegar	salt, sugar, oil, and vinegar create an environment that prevents microbial growths.	meat, pickles, jams, jellies, & vegetables
Pasteurization	heating a foodstuff to a high temperature and cooling it rapidly.	milk

9. What causes food poisoning?

Ans: The growth of microbes in food produces some toxic substances. When that contaminated food is eaten that leads to food poisoning.

10.. What is pasteurization? Who discovered it?

Ans: The process of heating food items to high temperature and cooling it rapidly is called pasteurization.

Loius Pasteur discovered the Pasteruziation.

11. What are preservatives? Name some common preservatives.

Ans: The chemicals that help to preserve food from spoiling are called preservatives. Sodium benzoate and potassium metabisulphite are some common preservatives.