2 Microorganisms : Friend and Foe

Multiple Choice Questions

1. Which of the following reproduces only inside a host cell?
   (a) Bacteria (c) Amoeba
   (b) Virus (d) Fungus.

2. A disease in human beings caused by virus is _____.
   (a) typhoid (c) dysentry
   (b) influenza (d) cholera

3. Pathogenic micro-organisms present in host cells are killed by medicines called
   (a) pain killer (c) antibiotics
   (b) antibodies (d) vaccines

4. The two micro-organisms which live in symbiotic association in lichens are
   (a) fungus and protozoa (c) bacteria and protozoa
   (b) alga and bacteria (d) alga and fungus

5. The gas released during the preparation of bread is
   (a) oxygen (c) nitrogen
   (b) carbon dioxide (d) sulphur dioxide

6. The disease caused by a protozoan and spread by an insect is _____.
   (a) dengue (c) polio
   (b) malaria (d) measles

7. Paheli dug two pits, A and B, in her garden. In pit A, she put a polyhtene bag packed with some agricultural waste. In pit B, she dumped the same kind of waste but without packing it in a polythene bag. She, then covered both the pits with soil. What did she observe after a month?
   (a) Waste in pit A degraded faster than that in pit B.
   (b) Waste in pit B degraded faster than that in pit A.

(c) Waste in both pits degraded almost equally.
(d) Waste in both pits did not degrade at all.

VERY SHORT ANSWER QUESTIONS

8. Unscramble the jumbled words underlined in the following statements.
   (a) Cells of our body produce santiidobe to fight pathogens.
   (b) curbossulite is an air-borne disease caused by a bacterium.
   (c) Xanrhat is a dangerous bacterial disease.
   (d) Yeasts are used in the wine industry because of their property of meronettinaf.

9. Suggest a suitable word for each of the following statements.
   (a) Chemicals added to food to prevent growth of microorganisms.
   (b) Nitrogen-fixing microorganism present in the root nodules of legumes.
   (c) Agent which spreads pathogens from one place to another.
   (d) Chemicals which kill or stop the growth of pathogens.

10. Match the names of scientists given in **Column A** with the discovery made by them given in **Column B**.

Column A	**Column B**
(a) Louis Pasteur	(i) Penicillin
(b) Robert Koch	(ii) anthrax bacterium
(c) Edward Jenner	(iii) Fermentation
(d) Alexander Fleming	(iv) small pox vaccine
	(v) Typhoid

11. Name one commercial use of yeast.

12. Name the process in yeast that converts sugars into alcohol.

13. In the soil, which nutrient is enriched by blue-green algae (cyanobacteria)?

14. Why should we avoid standing close to a tuberculosis patient while he/she is coughing?

15. Polio drops are not given to children suffering from diarrhoea. Why?

16. Paheli watched her grandmother making mango pickle. After she bottled the pickle, her grand mother poured oil on top of the pickle before closing the lid. Paheli wanted to know why oil was poured? Can you help her understand why?

SHORT ANSWER QUESTIONS

17. Match the microorganisms given in the **Column A** to the group to which they belong in **Column B**.

	Column A		**Column B**
(a)	*Lactobacillus*	(i)	Algae
(b)	Aspergillus	(ii)	Protozoa
(c)	Spirogyra	(iii)	Fungi
(d)	Paramecium	(iv)	Bacteria

18. Classify the following into friendly and harmful microorganisms.

Yeast, malarial parasite, *Lactobacillus*, bread mould, *Rhizobium*, *Bacillus anthracis*

Friendly	Harmful
_____	_____
_____	_____
_____	_____
_____	_____

19. While returning from the school, Boojho ate *chaat* from a street hawker. When he reached home, he felt ill and complained of stomach ache and fell ill. What could be the reason?

20. What will happen to '*pooris*' and 'unused kneaded flour' if they are left in the open for a day or two?

21. (a) Name two diseases that are caused by virus.
    (b) Write one important characteristic of virus.

LONG ANSWER QUESTIONS

22. Observe the Fig.2.1 and answer the questions that follows.

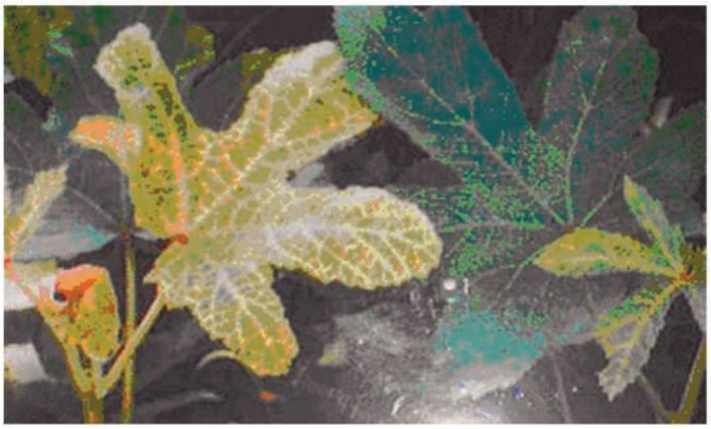


Fig. 2.1

(a) Write the name of the disease.
(b) Name the causative agent of this disease?
(c) How does the disease spread from one plant to another?
(d) Name any two plant diseases and the microbes that cause them.

23. How do vaccines work?

24. Observe the set up given in Fig. 2.2 and answer the following questions.
(a) What happens to the sugar solution in A?
(b) Which gas is released in A?
(c) What changes will you observe in B when the released gas passes through it?

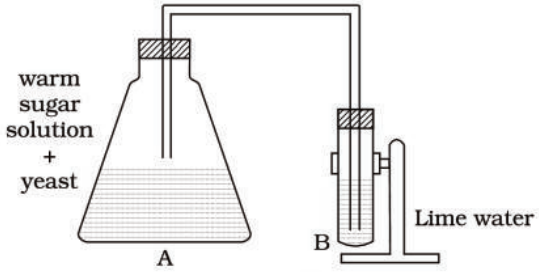


Fig. 2.2

25. Observe the Fig.2.3 and answer the following questions.

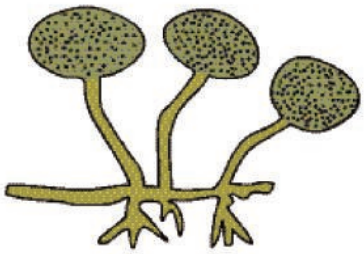


Fig. 2.3

(a) Name the microorganism and the group to which it belongs.
(b) Name the food item on which the organism grows.
(c) Does it grow well in dry or in moist conditions?
(d) Is it safe to eat infected bread?

26. Give reasons for the following.
(a) Fresh milk is boiled before consumption while processed milk stored in packets can be consumed without boiling.
(b) Raw vegetables and fruits are kept in refrigerators whereas jams and pickles can be kept outside.
(c) Farmers prefer to grow beans and peas in nitrogen deficient soils.
(d) Mosquitoes can be controlled by preventing stagnation of water though they do not live in water. Why?

27. How can we prevent the following diseases?
(a) Cholera
(b) Typhoid
(c) Hepatitis A

28. Complete the following cycle given as Fig. 2.4 by filling the blanks (a), (b), (c) (d)

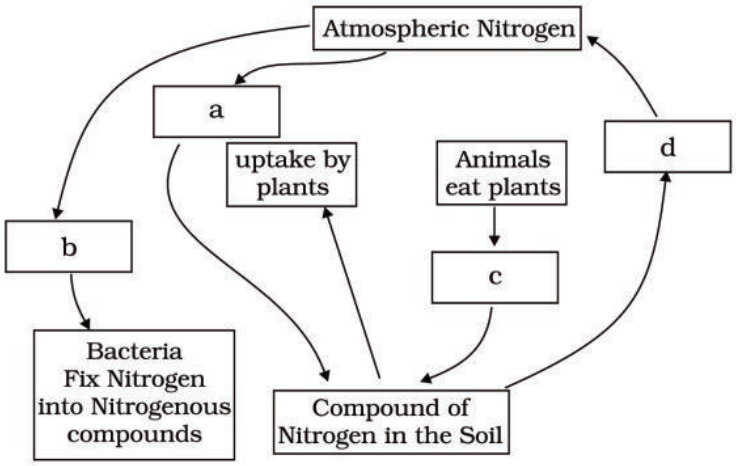


Fig. 2.4