# CHAPTER- 2

**MICROORGANISM: FRIENDS & FOES**

1.What is microorganism?

2. What is microbiology?

3. Classify the microorganisms on the basis of their cell structure.

4. Name the microorganism which is consider as living and non-living.

5.Give two examples each of the following microorganism-

a) bacteria b) fungi c) protozoans d) algae

6. What is the role of microorganism in our life? Give answer in brief.

7. Give one word answer-

a) bacteria that helps in the formation of curd.

b) microorganism that is used in Idli and Dosa to make it soft and fluffy.

c) bacteria are used in the biological treatment of sewage.

d) special kind of blood cell that get stimulated when microorganism enter our body.

e) anunpleasant taste or odour of food, contains fats and oils, caused by chemical change.

8. Define a) fermentation b) bioaugmentation c) pathogens d) immunity

9. What is antibiotics? How are they produced? Give two examples of these.

10. Microorganism ‘X’ is used for the largescale production of alcohol or wine. The conversion of sugar to alcohol is known as ’Y’. Gas ‘Z’ is produced during this process. What are X, Y, and Z?

11. List mode of transmission and two preventive measures each for the following diseases—

a) cholera b) malaria c) tuberculosis d) ringworm e) polio

12. Name the disease which is caused by following microorganism—

a) bacteria b) viruses c) fungi d) protozoans

13. Write mode of transmission of following disease—

a) common cold b) typhoid c) tetanus d) malaria e) tuberculosis

14. What is food preservation? Briefly describe about any five methods of food preservation. Give one examples of a food stuff preserved by each of these methods.

15. What is food poisoning? Write their symptoms and also write the name of bacteria and fungi which causes food poisoning.

16. Name the chemicals which are used in prevention of food.

17. Why are viruses considered at the borderline between living non-living things?

18. What is pasteurization? How do they produce immunity?

19. Write the name of microorganism which causes following disease in animal and also write the name of infected animal- a) Anthrax b) Rabies c) Ringworm d) Aspergillosis e) Canine distemper.

20. Identify the micro-organism causing the following plant diseases and also write its symptoms—

i) Red rot of sugarcane ii) Citrus canker iii) Tobacco mosaic virus iv) Smut of rice

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**CHAPTER—3**

**METALS & NON-METALS**

1. What is metallurgy? Name and define the steps generally involved in extraction of a metal from its ore.
2. Define an alloy. In what ways are alloys better than metals?
3. What are ores? Name the ore of aluminium and iron.
4. Give the example of following;
5. Metal that is liquid in state
6. Non-metal that is liquid in state
7. Two metals that can be cut with knife
8. Non-metal which conduct electricity
9. Non-metal which is lustrous
10. Differentiate between metals and non-metals on the basis of their physical state, density, malleability, ductility and conductivity.
11. Why are gold and platinum suitable for making jewellery?
12. Why are sodium and potassium stored under kerosene?
13. How are alloy better than pure metals? Write the composition of following alloys:
14. Steel b) Brass c) Bronze d) Alnico e) Gun metal f) German silver
15. What is metalloid? Give two examples.
16. What happens when (write balanced chemical equation):
17. Sodium reacts with oxygen
18. Sulphur reacts with oxygen
19. Aluminium reacts with dilute hydrochloric acid
20. Iron reacts with water(steam)
21. Write four uses of non-metals.
22. What is displacement reaction? Magnesium reacts with copper sulphate but zinc do not reacts with calcium sulphate. Give reason.
23. An element ‘X’ burns in air with a bright white light and forms a white powder which is found to be basic in nature. Element ‘X’, on heating with water, liberates a colourless gas which burns with popping sound. On the basis of above observation answer the following questions:
24. Identify the element ‘X’
25. Write the chemical name of the white powder formed
26. Write a simple method to show the basic nature of the white powder
27. Write balanced chemical equation for the reaction of ‘X’ with water.
28. Why is phosphorous stored in water? Name two non-metals which are present in fertilizers and enhance the growth of plants.
29. Name the gas evolved when zinc reacts with dilute hydrochloric acid. How is this gas identified? Write its chemical equation.
30. A magnesium ribbon is dipped in the solution of copper sulphate and observed the change after an hour:-a) what is the change in colour of solution?
31. Name the type of chemical reaction involved.
32. Write the balanced chemical equation for the above reaction
33. What is reactivity series? Name the most reactive and less reactive metal.

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