

Chapter 2

MULTIPLE CHOICE QUESTIONS

1. b 2. b 3. c 4. d
5. b 6. b 7. b

VERY SHORT ANSWER QUESTIONS

8. (a) antibodies (c) Anthrax
(b) tuberculosis (d) fermentation
9. (a) Preservatives (c) Carrier/vector
(b) *Rhizobium* (d) Antibiotics
10. (a)-(iii); (b) (ii); (c)-(iv); (d)-(i)
11. Baking bread/manufacture of alcoholic drinks
12. Fermentation
13. Nitrogen
14. Tuberculosis is an air-borne disease which easily spreads when the infected person coughs.
15. If the child is suffering from diarrhoea, the orally given vaccine may be excreted out because of frequent motions.
16. Oil prevents bacteria from attacking the pickle and spoiling it.

SHORT ANSWER QUESTIONS

17. (a)-(iv), (b)-(iii), (c)-(i), (d)-(ii)
- 18.
- | Friendly | Harmful |
|----------------------|---------------------------|
| Yeast | Malarial parasite |
| <i>Lactobacillus</i> | Bread mould |
| <i>Rhizobium</i> | <i>Bacillus anthracis</i> |

19. The probable reason is that the *chaat* was contaminated by pathogenic microbes due to unhygienic conditions near the shop or the utensil used for serving could have contaminated.
20. The 'unused kneaded flour', if left in warm conditions, gets infected by microbes which cause fermentation and spoils the flour. The *pooris* would remain in relatively good condition because they were deep fried in heated oil that kills microbes.
21. (a) Polio/Chicken Pox/Influenza
(b) Virus can reproduce only inside the cells of host.

LONG ANSWER QUESTIONS

22. (a) Yellow vein mosaic of lady's finger/okra
(b) Virus
(c) The disease spreads from one plant to another through insects.
(d) (i) Citrus canker caused by bacteria (ii) Rust of wheat caused by fungus or any other disease
23. Vaccines contain dead or weakened microbes of a particular disease. When a vaccine is introduced into a healthy body, the body fights and kills them by producing suitable antibodies. These antibodies remain in the body and protects it when the microbe enters the body again.
24. (a) Yeast causes fermentation converting sugar into alcohol and carbon dioxide.
(b) Carbon dioxide
(c) Lime water turns milky
25. (a) Bread mould. It is a fungus.
(b) Moist and stale bread.
(c) It grows well in moist conditions.
(d) No, the fungus spoils the bread by producing poisonous substances.
26. (a) Fresh milk is boiled before consumption to kill the microorganisms in it. But packed milk is pasteurised and does not contain any microorganisms. It can thus be consumed without boiling.
(b) Raw vegetables and fruits get easily infected by microorganisms and get spoilt. They are kept in refrigerator

as low temperature inhibits growth of microbes. Jams and pickles contain sugar and salt as preservatives. They do not get infected by microbes easily.

- (c) Beans and peas are leguminous plants and have *Rhizobium* in their root nodules. These bacteria can fix atmospheric nitrogen to enrich the soil with nitrogen and increase its fertility.
 - (d) Though mosquitoes live on land, their larvae grow in water. If water stagnation is prevented the larvae cannot survive.
27. (a) Cholera: By maintaining personal hygiene and good sanitation practices.
- (b) Typhoid: Eating properly cooked food, drinking boiled food, getting vaccinated against the disease.
- (c) Hepatitis A: Drinking boiled water and getting vaccinated against the disease.
28. (a) Lightning fixes nitrogen.
- (b) Nitrogen fixing bacteria and blue green algae fix atmospheric nitrogen.
- (c) Nitrogenous waste from excretion and death.
- (d) Bacteria turn compounds of nitrogen into gaseous nitrogen.