# 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**Yeast Malarial parasite Lactobacillus Bread mould Rhizobium Bacillus anthracis

114 EXEMPLAR PROBLEMS

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 fementation 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, gettting 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) Nitrogeneous waste from excretion and death.
  - (d) Bacteria turn compounds of nitrogen into gaseous nitrogen.