

# **MULTIPLE CHOICE QUESTIONS**

- 1. Which of the following is waste water?
  - (a) Water trickling from a damaged tap.
  - (b) Water coming out of a shower.
  - (c) Water flowing in a river.
  - (d) Water coming out of a laundry.
- 2. Sewage is mainly a
  - (a) liquid waste.
  - (b) solid waste.
  - (c) gaseous waste.
  - (d) mixture of solid and gas.
- 3. Which of the following is/are products of wastewater treatment?
  - (a) Biogas
  - (b) Sludge
  - (c) Both biogas and sludge
  - (d) Aerator
- 4. Open drain system is a breeding place for which of the following.
  - (a) Flies
  - (b) Mosquitoes
  - (c) Organisms which cause diseases
  - (d) All of these
- 5. Water polluted by various human activities causes a number of water borne diseases. Which of the following is not a water borne disease?
  - (a) Cholera
  - (b) Typhoid
  - (c) Asthma
  - (d) Dysentry

- 6. Pick from the following one chemical used to disinfect water.
  - (a) Chlorine
  - (b) Washing soda
  - (c) Silica
  - (d) Coal
- 7. The system of a network of pipes used for taking away wastewater from homes or public buildings to the treatment plant is known as
  - (a) sewers.
  - (b) sewerage.
  - (c) transport system.
  - (d) treatment plant.
- 8. Which of the following is a part of inorganic impurities of the sewage?
  - (a) Pesticides
  - (b) Urea
  - (c) Phosphates
  - (d) Vegetable waste
- 9. In a filtration plant water is filtered using layers of
  - (a) sand and clay.
  - (b) clay and fine gravel.
  - (c) sand and fine gravel.
  - (d) sand, fine gravel and medium gravel.
- 10. Which of the following is not a source of waste water?
  - (a) Sewers
  - (b) Homes
  - (c) Industries
  - (d) Hospitals

### VERY SHORT ANSWER QUESTIONS

- 11. Why are open drains a concern?
- 12. State whether the following statements are True or False. In case a statement is false, write the correct statement.
  - (a) Sewage is a solid waste which causes water pollution and soil pollution.

94

- (b) Used water is wastewater.
- (c) Wastewater could be reused.
- (d) Where underground sewerage systems and refuse disposal systems are not available, the high cost on-site sanitation system can be adopted.
- 13. How are open drains harmful for human health?

### SHORT ANSWER QUESTIONS

- 14. Name two inorganic impurities present in sewage.
- 15. Animal waste, oil and urea are some of the organic impurities present in sewage. Name two more organic impurities present in sewage.
- 16. Name two alternative arrangements for sewage disposal where there is no sewerage system.
- 17. A man travelling in a train threw an empty packet of food on the platfrom. Do you think this is a proper waste disposal method? Elaborate.
- 18. Why should we not throw
  - (a) used tea leaves into sink?
  - (b) cooking oil and fats down the drain?
- 19. Match the items of **Column I** with the items of **Column II** with reference to sewage.

	Column I		Column II
(a)	Inorganic impurities	(i)	phosphorus and nitrogen
(b)	Organic impurities	(ii)	nitrates and phosphates
(c)	Nutrients	(iii)	cholera and typhoid
(d)	Bacteria	(iv)	pesticides and herbicides

- 20. Given below is a jumbled sequence of the processes involved in a wastewater treatment plant. Arrange them in their correct sequence.
  - (a) Sludge is scraped out and skimmer removes the floating grease.
  - (b) Water is made to settle in a large tank with a slope in the middle.
  - (c) Large objects like plastic bags are removed by passing wastewater through bar screens.
  - (d) Sand, grit and pebbles are made to settle by decreasing the speed of incoming wastewater.
  - (e) Wastewater enters a grit and sand removal tank.
- 21. Three statements are provided here which define the terms –(a) sludge (b) sewage and (c) wastewater. Pick out the correct definition for each of these terms.
  - (a) The settled solids that are removed in wastewater treatment with a scraper.
  - (b) Water from kitchen used for washing dishes.
  - (c) Wastewater released from homes, industries, hospitals and other public buildings.
- 22. A mixture (x) in water contains suspended solids, organic impurities, inorganic impurities (a), nutrients (b), disease causing bacteria and other microbes. Give names for (x), (a) and (b)?

## LONG ANSWER QUESTIONS

- 23. What are the different types of inorganic and organic impurities generally present in sewage?
- 24. The terms sewage, sewers and sewerage are interlinked with each other. Can you explain, how?

25. Fill in the blanks in the following statements using words given in the box.

#### air, handpumps, cholera, water, large, ground

A very \_\_\_\_\_\_ number of our people defecate in the open. It may cause \_\_\_\_\_\_ pollution and soil pollution. Both the surface water and \_\_\_\_\_\_ water get polluted. \_\_\_\_\_ water is the source for wells, tubewells and \_\_\_\_\_\_. Thus it becomes the most common route for \_\_\_\_\_\_ borne diseases like \_\_\_\_\_, dysentery, etc.

- 26. Describe various steps of cleaning wastewater in a wastewater treatment plant.
- 27. Think and suggest some ways to minimise waste and pollutants at their source, taking your home as an example.

97