

Q.43 Which of the bacteria causes the cholera?

Ans. Bacteria vibrio cholera causes cholera.

Multiple Choice Questions

1. Which one of the properties of water is responsible for rising of water plants?

- (a) specific heat capacity
- (b) surface tension
- (c) excellent solvent action
- (d) capillary action

2. Specific heat capacity of water is

- (a) $4.2 \text{ kJg}^{-1}\text{K}^{-1}$
- (b) $4.2 \text{ Jg}^{-1}\text{K}^{-1}$
- (c) $2.4 \text{ KJg}^{-1}\text{K}^{-1}$
- (d) $2.4 \text{ Jg}^{-1}\text{K}^{-1}$

3. Water dissolves non-ionic compound by

- (a) ion-ion forces
- (b) ion-dipole forces
- (c) dipole –dipole forces
- (d) hydrogen bonding

4. Temporary hardness is because of

- (a) $\text{Ca}(\text{HCO}_3)_2$
- (b) CaCO_3
- (c) MgCO_3
- (d) MgSO_4

5. Temporary hardness is removed by adding

- (a) quick lime
- (b) slaked lime
- (c) lime stone
- (d) lime water

6. Permanent hardness is removed by adding

- (a) $\text{Na}_2\text{zeolite}$
- (b) soda lime
- (c) lime water
- (d) quick lime

7. Which one of the following salts makes the water permanently hard?

- (a) NaCO_3
- (b) NaHCO_3
- (c) $\text{Ca}(\text{HCO}_3)_2$
- (d) CaSO_4

8. Rapid growth of algae in water bodies is because of detergent having

- (a) carbonate salts
- (b) sulphonic acid salts
- (c) sulphate salts
- (d) phosphate salts

9. Which one of the followings is not a reason of depletion of O_2 from water

- (a) decaying of aquatic plants
- (b) biodegradation of aquatic plants
- (c) sulphate salts
- (d) phosphate slats

10. Which one of the following diseases causes liver inflammation?

- (a) typhoid
- (b) jaundice
- (c) cholera
- (d) hepatitis

11. Which one of the following diseases causes severe diarrhea and can be fatal?

- (a) jaundice
- (b) dysentery
- (c) cholera
- (d) typhoid

12. Which one of the following gases is used to destroy harmful bacteria in water?

- (a) iodine
- (b) chlorine
- (c) fluorine
- (d) bromine

13. The percentage of water in human body is

- (a) 40% (b) 50%
- (c) 60% (d) 70%

14. The percentage of oceans in world water is

- (a) 50% (b) 67%
- (c) 97% (d) 25%

15. Inland water includes

- (a) River (b) Lakes
- (c) Streams (d) All of them

16. Sea water is unfit for drinking purpose due to the presence of

- (a) Salts (b) Algae
- (c) Fishes (d) All of them

17. The percentage of potable water on earth is

- (a) 2% (b) 0.2%
- (c) 0.02% (d) 0.002%

18. The freezing point of water is

- (a) 10^0C (b) 100^0C
- (c) 0^0C (d) 46^0C

19. The boiling point of water is

- (a) 100^0C (b) 4^0C
- (c) 0^0C (d) 25^0C

20. Water has a maximum density at

- (a) 10^0C (b) 0^0C
- (c) 4^0C (d) 100^0C

21. The heat capacity of water is

- (a) $4.2 \text{ Jg}^{-1}\text{k}^{-1}$ (b) $2.1 \text{ Jg}^{-1}\text{k}^{-1}$
- (c) $3.2 \text{ Jg}^{-1}\text{k}^{-1}$ (d) $5.9 \text{ Jg}^{-1}\text{k}^{-1}$

22. Water has a maximum density at 4^0C

- (a) 12 cm^{-3} (b) 2 g cm^{-3}
- (c) 1 g cm^{-3} (d) 4 gcm^{-3}

23. How many times the heat capacity of water is greater than that of rocks.

- (a) two (b) three
- (c) four (d) Six

24. The process by which water rises up from the roots of plants to leaves is called

- (a) Photosynthesis (b) Respiration
- (c) Surface tension (d) Capillary action

25. Which of the following salt is soluble in water?

- (a) NaCl (b) KCl
- (c) Na_2SO_4 (d) All of them

26. Which of the following is insoluble in water?

- (a) Benzene (b) NaCl
- (c) KCl (d) All of them

27. One H_2O molecule can form hydrogen bonding with how many other H_2O molecules?

- (a) One (b) Two
- (c) Three (d) Four

28. Water molecules show structure

- (a) Tetrahedral (b) Trigonal
- (c) Pentagonal (d)

29. Some organic compounds are soluble in water due to the presence of

- (a) -OH (b) H^+
- (c) both a and b (d) covalent bond

30. Which of the following is soluble in water?

- (a) Organic acids (b) glucose
- (c) alcohols (d) all of them

31. Water which produces good lather with soap is called

- (a) Soft water (b) Hard water
(c) Heavy water (d) All of them

32. Chemical form of gypsum

- (a) $\text{MgSO}_4 \cdot 5\text{H}_2\text{O}$ (b) $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$
(c) $\text{FeSO}_4 \cdot 5\text{H}_2\text{O}$ (d) $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$

33. Chemical formula of lime stone is

- (a) CaO (b) Ca(OH)_2
(c) CaCO_3 (d) All of them

34. Gypsum in water is

- (a) Sparingly soluble (b) insoluble
(c) Highly soluble (d) None of them

35. Temporary hardness is due to the presence of bicarbonates of

- (a) Calcium (b) Magnesium
(c) Both of them (d) None of them

36. The removal of which ion causes water softening

- (a) Na^+ (b) Mg^{2+}
(c) Li^+ (d) K^+

37. Calcium carbonate is in water

- (a) Insoluble (b) Sparingly
(c) None of them (d) soluble

38. Temporary hardness in water can be removed by

- (a) Boiling Method
(b) Using washing soda
(c) Using Sodium zeolite
(d) All of them

39. Sodium zeolite is naturally occurring reason of

- (a) $\text{NaAl (SiO}_3)_2$ (b) Na_2CO_3
(c) CaCO_3 (d) Na_2SiO_3

40. Hard water can cause

- (a) Stomach disorder
(b) Boiler blasts
(c) Inefficiency of engine
(d) All of them

41. Soap is the sodium salt of long chain

- (a) Amino acids (b) Fatty acids
(c) Nucleotides (d) None of them

42. Mg^{2+} and Ca^{2+} ions react with soap to form calcium and magnesium salts of fatty acids called

- (a) gelatin (b) Scum
(c) Paste (d) None of them

43. Industrial effluents are highly

- (a) Toxic organic compounds
(b) Inorganic Salts
(c) Heavy Metals
(d) All of them

44. Which is not a heavy metal?

- (a) Cadmium (b) Lead
(c) Zinc (d) Mercury

45. Acute cadmium poisoning causes

- (a) High Blood pressure
(b) Kidney damage
(c) Destruction of RBC's
(d) All of them

46. Acute lead poisoning causes dysfunction of

- (a) Kidney (b) liver
(c) CNS (d) All of them

47. Neurological damage is caused by the poisoning of

- (a) Lead (b) Cadmium
(c) Mercury (d) All of them

48. The salts of which element are present in detergent that causes the rapid growth of algae in water bodies is

- (a) Phosphate (b) Calcium
(c) Sodium (d) All of them

49. The depletion of which gas results in the death of aquatic life.

- (a) Oxygen (b) Carbon dioxide

- (c) Both of them (d) None of them

50. Example of pest is

- (a) Weeds (b) Herbs
(c) Insects (d) all of them

51. Which element protects teeth from decay?

- (a) Potassium (b) Fluorine
(c) Sodium (d) Calcium

52. Which disease is caused by polluted water?

- (a) Cholera (b) Typhoid
(c) Diarrhea (d) All of them

53. Which element do not causes toxicity in water?

- (a) Lead (b) Arsenic
(c) Sodium (d) Mercury

54. Vibriosis cholera causes

- (a) Cholera (b) Dysentery
(c) Fluorosis (d) Hepatitis

55. Which hepatitis is caused by contaminated water?

- (a) Hepatitis A (b) Hepatitis B
(c) Hepatitis D (d) Hepatitis C

56. Hookworm infects.

- (a) Liver (b) small intestine

- (c) Large intestine (d) Stomach

57. Hook worm larvae enter the body through

- (a) Food (b) water
(c) Skin (d) All of them

58. A disease is caused by excess of bile pigments in the blood is

- (a) typhoid (b) Jaundice
(c) Cholera (d) Dysentery

59. Which organ ceases to function during Jaundice?

- (a) Liver (b) Kidney
(c) Stomach (d) large intestine

60. Swimming pools are cleaned by the process

- (a) Chlorination
(b) Hydrogenations
(c) None of these
(d) Saponification

61. Chemical formula of hypochlorous acid is

- (a) HCl (b) HOCl
(c) H_2CO_3 (d) HF

Answer Key

1	d	2	B	3	d	4	A	5	b
6	a	7	d	8	d	9	C	10	d
11	b	12	d	13	d	14	C	15	d
16	a	17	b	18	c	19	A	20	c
21	a	22	c	23	d	24	D	25	d
26	a	27	d	28	a	29	A	30	d
31	a	32	b	33	c	34	A	35	c
36	b	37	a	38	a	39	a	40	d
41	b	42	b	43	a	44	c	45	d
46	d	47	c	48	a	49	a	50	d
51	b	52	d	53	c	54	a	55	a
56	b	57	c	58	b	59	a	60	a
61	b								