

CLASS 10TH (CHEMISTRY)
FULL BOOK MCQS

Encircle the correct option.

1. About 99% atmosphere mass lies within.
☒ a) 30 km b) 35 km c) 15 km d) 11 km
2. One of the following organic compound is found in gasoline:
a) C_2H_4 b) C_3H_8 ☒ c) C_8H_{18} d) $C_{12}H_{26}$
3. Main component of natural gas is:
☒ a) methane b) propane c) butane d) propyne
4. 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) $2.4 \text{ Jg}^{-1}\text{K}^{-1}$ d) $2.4 \text{ KJg}^{-1}\text{K}^{-1}$
5. Matte is a mixture of:
a) FeS and CuS b) Cu_2O and FeO
☒ c) Cu_2S and FeS d) CuS and FeO
6. Colour of iodine:
a) white b) blue c) red ☒ d) purple
7. The organic compounds used as drugs to control bleeding are:
a) vitamins ☒ b) proteins c) lipids d) Glycerides
8. One of these pollutants is found in car exhaust fumes:
☒ a) CO_2 b) O_3 c) N_2 d) H_2
9. Oxidation of alkenes produce:
a) Glyoxal ☒ b) glycol c) oxalic acid d) formic acid
10. A disease that causes bone and tooth damage is:
☒ a) Fluorosis b) Hepatitis c) cholera d) jaundice
11. Gas used for cleaning swimming pool:
a) iodine ☒ b) chlorine c) fluorine d) bromine
12. One of the following is a reducing sugar:
☒ a) Glucose b) maltose c) Sucrose d) starch
13. Identify that which product is used as jet fuel:
☒ a) kerosene oil b) lubricating oil c) diesel oil d) fuel oil
14. At dynamic equilibrium _____:
a) reaction stops to proceed
b) the amount of reactants and products are equal
☒ c) the speed of forward and reverse reaction are equal
d) the reaction can no longer be reversed
15. In Solvay's process slaked lime is used to:
a) Prepare CO_2 b) prepare quick lime
☒ c) recover ammonia d) from Na_2CO_3
16. One is a Lewis base:
☒ a) NH_3 b) BF_3 c) H^+ d) $AlCl_3$
17. Vigorous reaction of water with _____ shatter (glass wear) into small pieces
a) sodium ☒ b) caesium c) strontium d) silicon
18. Coal having 90% carbon content is called:
a) peat b) lignite ☒ c) anthracite d) bituminous
19. Acid rain affects the aquatic life by clogging fish gills because of:
a) lead metal b) chromium metal c) mercury metal ☒ d) Aluminium metal
20. The order of reactivity of hydrogen halides with alkenes is:
☒ a) $HI > HBr$ b) $HBr > HI$ c) $HCl > HBr$ d) $HBr < HCl$

21. Carbon monoxide is harmful to us because_____:
- a)it paralyses the lungs c)it makes the blood coagulate
b)it damages lungs tissues ✓d)it reduces oxygen carrying ability of haemoglobin
22. In laboratory urea was prepared by :
- ✓a)Wholer b)Rutherford c)Berzellius d)Dalton
23. The structure of iron and steel is damaged by :
- a)CO ✓b)sulphur dioxide c)methane d)CO₂
24. Just above the Earth's surface is:
- a)mesosphere b)stratosphere c)thermosphere ✓d)troposphere
25. Temporary hardness of water is because of
- ✓a)Ca(HCO₃)₂ b)CaCO₃ c)MgCO₃ d)MgSO₄
26. Formula of urea is:
- a)NH₂COONH₄ b)NH₂COONH₂ ✓c)NH₂CONH₂ d)NH₂CONH₄
27. A salt is not composed of:
- a)a metallic cation b)non-metallic cation
✓c)an anion of a base d)an anion of an acid
28. Halogenation of methane does not produce:
- a)carbon tetrachloride b)chloroform
✓c)carbon black d)chloromethane
29. Fat soluble vitamin is:
- a)A b)E c)K ✓d)all of these
30. One of the following is not a green house effect:
- a)increasing atmospheric temperature b)increasing sea-level
c)increasing flood risks ✓d)increasing food chains
31. One of the following gases is used to destroy harmful bacteria in water:
- a)iodine ✓b)chlorine c)fluorine d)bromine
32. Concentration is a:
- a)mixing technique ✓b)separating technique c)cooling technique d)boiling technique
33. One is a secondary pollutant:
- a)CH₄ b)SO₃ c)SO₂ ✓d)HNO₃
34. Petroleum is refined by:
- a)Destructive distillation b)fractional distillation
c)Simple distillation d)Dry distillation
35. Disease caused by protozoa is:
- a)Dysentery ✓b)Cholera c) cryptosporidium d)hepatitis
36. Deficiency of Vitamin E causes:
- a)rickets b)scurvy c)night blindness ✓d)anemia in babies
37. Which one of the following is triglyceride
- a)carbohydrates b)proteins ✓c)lipids d) vitamins
38. The reduction of alkyl halides takes place in the presence of:
- ✓a)Zn/HCl b)Na/HCl c)Mg/HCl d) Cu/HCl
39. Pitch is a black residue of
- a)coke ✓b)coal tar c)carbon black d)coal gas
40. A reaction between an acid and base produces:
- ✓a)salt and water b)salt and gas c)salt and acid d)salt and base
41. Bases have taste:
- ✓a)bitter b)sweetish c)sour d)salty
42. Which base is more corrosive?

a) NH_4OH ✓b) NaOH c) $\text{Ca}(\text{OH})_2$ d) $\text{Al}(\text{OH})_3$

43. Sum of pOH and pH solution is:

a) 18 b) 7 c) 16 ✓d) 14

44. Benzene is formed by polymerization of

A) methane b) acetylene ✓c) ethyne d) butene

45. Chemical compounds used in clark method:

✓A) $\text{Ca}(\text{OH})_2$ b) NaOH c) HCL d) CaO

46. How many % of world water contain ocean

A) 67% b) 77% c) 87% ✓d) 97%

47. The density of water at 4°C

a) 4gcm^{-3} b) 3gcm^{-3} c) 2gcm^{-3} ✓d) 1gcm^{-3}

48. _____ is oxidizing agent

A) HCL ✓b) KMnO_4 c) NaOH d) NaCl

49. Crude oil is heated in the fractionating furnace upto

A) 300°C b) 350°C ✓c) 400°C d) 450°C

50. The nitrogen present in urea is used by plants to synthesize:

A) sugar ✓b) proteins c) fats d) DNA

51. Temporary hardness of water can be removed by:

A) CaO B) Na_2CO_3 ✓C) $\text{Ca}(\text{OH})_2$ D) CaCO_3

52. Depending upon temperature atmosphere is divided into _____ regions

✓A) 4 b) 3 c) 3 d) 1

53. Photosynthesis produce:

A) sucrose b) cellulose ✓c) glucose d) starch

54. The molecular formula for eight alkane member octane found in petrol

a) $\text{C}^8 \text{H}^8$ b) $\text{C}^8 \text{H}^{16}$ ✓c) $\text{C}^8 \text{H}^{18}$ d) $\text{C}^8 \text{H}^{20}$

55. In solvays process the product NaHCO_3 can be obtained by maintaining temperature at:

A) 10°C ✓b) 15°C c) 20°C d) 25°C

56. The value of the K_c depends on:

A) initial concentration of reactions b) initial concentration of products

✓C) temperature d) both A & B

57. $K_c = \frac{\text{_____}}{\text{_____}}$

✓a) $\frac{K_f}{K_r}$ b) $\frac{K_r}{K_f}$ c) $\frac{K_f}{K_c}$ d) $\frac{K_f}{K_t}$

58. Example of lewis acid is:

a) NH_3 ✓b) BF_3 c) H_3CNH_2 d) H_3COH

59. Anthracite contain the carbon content:

A) 60% b) 70% c) 80% ✓d) 90%

60. The formula of chloroform is

A) CH_3Cl b) CH_2Cl_2 ✓c) CHCl_3 d) CCl_4

61. The conjugate base of sulphuric acid is;

a) SO_3^{2-} b) SO_2 c) HSO_3 ✓d) HSO_4

62. The angle in H_2O molecule is:

a) 102° b) 110° ✓c) 104.5° d) 100°

63. Carbon tetrachloride is used in:

a) carbon black b) chloroform ✓c) dry cleaning d) domestic fuel

64) Which one of the following is not characteristics of monosaccharides?

a) white crystalline solids c) soluble in water

✓b) Hydrolysable d) reducing in nature

65) Which one is also called 'Olefins'

- a) alkanes ☒ b) alkenes c) alkynes d) alcohols
- 66) Catalyst used for hydrogenation of vegetable oil is:
a) Al ☒ b) Ni c) Co d) Pt
- 67) Guldberg and Waage put forward Law of mass action in:
a) 1859 ☒ b) 1869 c) 1879 d) 1889
- 68) The molar concentration is expressed in:
a) { } ☒ b) [] c) () d) all
- 69) Our planet earth has natural systems:
a) 2 b) 3 ☒ c) 4 d) 5
- 70) What is the pOH of 0.02M $\text{Ca}(\text{OH})_2$?
A) 1.698 ☒ b) 1.397 c) 12.31 d) 12.6
- 71) Acetic acid is used for:
☒ A) Flavouring food b) making explosives c) etching designs d) cleaning
- 72) Dehydration means removal of:
☒ A) water b) halogen c) hydrogen d) nitrogen
- 73) Temporary hardness is removed by the method:
a) By freezing b) by filtration ☒ c) by boiling d) by aeration
- 74) The salt used to dry a gas is :
☒ a) CaCl_2 b) NaCl c) CaO d) NaSiO_3
- 75) A salt always:
☒ a) Contains ions b) contains water of crystallization
c) Dissolves in water d) forms crystals which conduct electricity
- 76) The functional group $-\text{COOH}$ is found in:
☒ a) Carboxylic acids b) aldehydes c) alcohols d) Esters
- 77) The end product of oxidation of acetylene is:
a) Oxalic acid b) glycol ☒ c) glyoxal d) benzene
- 78) Glucose and fructose combine to form:
a) Starch b) cellulose ☒ c) sucrose d) lipids
- 80) The disease cause severe diarrhea and can be fatal:
a) Jaundice b) dysentery ☒ c) cholera d) typhoid
- 81) Deficiency of vitamin D cause:
☒ a) Rickets b) scurvy c) anemia in babies d) night blindness
- 82) Which gas protect the earth surface from ultraviolet radiations:
a) CO_2 b) CO c) N_2 ☒ d) O_3
- 83) Iron and steel structures are damaged by:
a) Carbon monoxide ☒ b) Sulphur dioxide c) methane d) carbon dioxide
- 84) A disease that cause bone and tooth damage is:
☒ a) Fluorosis b) hepatitis c) cholera d) jaundice
- 85) When NaHCO_3 is heated it form :
☒ a) CO_2 b) $\text{Ca}(\text{OH})_2$ c) CaCO_3 d) CaO
- 86) The color of hydrogen iodide is:
a) Red b) orange c) blue ☒ d) colorless
- 87) Which one of the following is synthetic fiber:
a) Cotton b) wool ☒ c) nylon d) silk
- 88) Dehalogenation of tetrahalides produces acetylene this reaction take place in the presence of:
a) Sodium metal ☒ b) zinc metal c) magnesium metal d) potassium metal
- 89) The process by which atmospheric nitrogen is turned into nitrates in the soil is called:

a) Nitration ☒ b) fixing c) oxidation d) reduction

90) Which one of the following does not contain starch?

☒ a) sugar cane b) maize c) barley d) potatoes

91) Usually meant by active mass is:

☒ a) molar concentration b) reaction Quotient

c) reaction rate c) K_c expression

92) Unit of active mass is:

a) mole dm³ b) mole dm⁻¹ ☒ c) mole dm⁻³ d) mole dm⁻²

93) Bleaching powder is an example of

☒ a) mixed salt b) acidic acid c) double salt d) none

94) Which is Lavoisier acid:

a) HCl b) H₂SO₄ c) CO₂ ☒ d) HNO₃

95) The first acid known to man was

a) benzoic acid ☒ b) acetic acid c) Sulphuric acid d) nitric acid

96) A neutral salt is not composed of

a) a metallic cation b) non-metallic cation

c) an anion of base ☒ d) an anion of an acid

97) In strong acidic solution the color of litmus becomes

☒ a) red b) blue c) yellow d) colorless

98) Sources of galactose are

☒ a) fruits b) rice c) Cotton d) cellulose

99) Which of these does not contain protein?

a) pulses ☒ b) potatoes c) beans d) eggs

100) The impurities associated with minerals are known as:

a) metallurgy b) ores ☒ c) gangue d) compounds