

General Science Model Test Questions 15 With Answers [Chemistry - 4]

- A chemical equation indicates the
(A) Speed of the reaction (B) Extent to which the reaction occurs
(C) Products of the reaction (D) Conditions to speed up the reaction
- Ammonia can be obtained by heating an ammonium salt with
(A) An acid (B) A caustic alkali
(C) An oxidizing agent (D) A reducing agent
- Chemically dry ice is
(A) Solid carbon dioxide (B) Ice formed from pure water
(C) Solid sulphur dioxide (D) Ice kept at sub-zero temperature
- The metal present in haemoglobin is
(A) Iron (B) Magnesium (C) Copper (D) Zinc
- Stainless steel is an alloy of
(A) Iron and nickel **(B) Iron, chromium and nickel**
(C) Iron, chromium and zinc (D) Iron and manganese
- Terylene is the polyester of
(A) Ethylene glycol and phthalic acid (B) Hexamethylene diamine and adipic acid
(C) Phenol and formaldehyde (D) Urea and formaldehyde
- Which of the following hormones contains iodine?
(A) Adrenaline (B) Testosterone (C) Insulin **(D) Thyroxine**
- Half life of any first order reaction is a
(A) Variable **(B) Constant**
(C) Doubtful quantity (D) None of the above
- Emission of which one of the following leaves both atomic number and mass number unchanged?
(A) Positron (B) Neutron (C) Alpha particle **(D) Gamma ray**
- Which one of the following salts will show acidic character when dissolved in water?

- (A) Sodium chloride (B) Potassium chloride
(C) Lithium chloride (D) **Ammonium chloride**
11. Two of the most common elements in the earth's crust would include
(A) **Nitrogen and oxygen** (B) Nitrogen and silicon
(C) Carbon and oxygen (D) Silicon and oxygen
12. The drugs, caffeine, tannins and nicotine are
(A) Steroids (B) Milk alkalis (C) **Alkaloids** (D) Cortisones
13. Diamond is chemically
(A) A mixture of metal carbonates (B) A pure form of sand
(C) **Pure carbon** (D) A mixture of calcium & magnesium phosphates
14. Which of the following statements about the physical properties of metal is not correct?
(A) All metals are solid except mercury
(B) Most of the metals are hard except sodium and potassium
(C) **Metals are not malleable**
(D) Most of the metals are ductile
15. Bakelite is manufactured by the reaction between
(A) Ethylene glycol and phthalic acid (B) Melanine and formaldehyde
(C) **Phenol and formaldehyde** (D) Urea and formaldehyde
16. Which of the carbohydrates is used in silvering of mirror?
(A) Sucrose (B) Cellulose (C) Starch (D) **Glucose**
17. The meaning of TFM written on soap covers is
(A) Total fatty material and indicates the quality
(B) **Total fatty material and indicates the density**
(C) Thin fat matter and indicates the quality
(D) Thin fat matter and indicates the density
18. Alpha rays carry

- (A) 2 units of +ve charge (B) 1 unit of +ve charge
(C) 1 unit of -ve charge (D) No charge
19. Which one of the following enzymes brings about the hydrolysis of cane sugar to glucose and fructose?
(A) **Invertase** (B) Zymase (C) Diastase (D) Lipase
20. Mention the chemical which is a food preservative
(A) Sodium carbonate (B) Sodium bicarbonate
(C) Sodium thiosulphate **(D) Sodium benzoate**
21. The noble gas is
(A) Nitrogen (B) Oxygen (C) Chlorine **(D) Neon**
22. Which is the heaviest metal?
(A) **Mercury** (B) Iron (C) Nickel (D) Osmium
23. The element named after the sun is
(A) Oxygen (B) Neon **(C) Helium** (D) Iodine
24. The valency of phosphorus in PCl_3 is
(A) 2 **(B) 3** (C) 4 (D) 5
25. Which one of the following statement is correct?
(A) **Mass of a proton** - **mass of a neutron**
(B) Charge of an electron - charge of a neutron
(C) Mass of an electron - mass of proton
(D) Charge of a proton - charge of a neutron
26. Acid rain is caused by
(A) CO and CO_2 (B) CO_2 and O_3 (C) N_2 and CO_2 **(D) N_2O and SO_2**
27. Stainless steel is an alloy of
(A) Iron and nickel **(B) Iron, chromium and nickel**
(C) Iron, chromium and zinc (D) Iron and manganese
28. 'Power alcohol' is a mixture of

- (A) Ethyl alcohol + petrol (B) Ethyl alcohol + methyl alcohol
 (C) Ethyl alcohol + propyl alcohol (D) Ethyl alcohol + benzene
29. An element common to brass and bronze is
 (A) Copper (B) Zinc (C) Tin (D) Nickel
30. Which of the following is a balanced source of plant nutrient?
 (A) Urea (B) Ammonium sulphate (C) NPK (D) Compost
31. Cotton is bleached by
 (A) Chlorine (B) Potassium chloride
 (C) Hydrogen chloride (D) Carbon dioxide
32. Sand is an oxide of
 (A) Calcium (B) Silicon (C) Magnesium (D) Iron
33. Pure gold is
 (A) 18 carat gold (B) 20 carat gold (C) 22 carat gold (D) 24 carat gold
34. Match the following:
 (a) Glass 1. Phosphorous
 (b) Molasses 2. Sodium silicate
 (c) Match stick 3. Cinchona
 (d) Quinine 4. Sugarcane
- Codes:
- | | | | | |
|-----|---|---|---|---|
| | a | b | c | d |
| (A) | 2 | 4 | 3 | 1 |
| (B) | 1 | 3 | 2 | 4 |
| (C) | 2 | 4 | 1 | 3 |
| (D) | 4 | 2 | 1 | 3 |
35. Acetyl salicylic acid is used as
 (A) Pain reliever (B) Paint (C) Fertilizer (D) Coolant
36. The important ingredient present in coffee is
 (A) Caffeine (B) Theobromine (C) Cinchonine (D) Quinine

37. Which is the sweetest of the following sugars?
(A) Glucose (B) Fructose (C) **Cellobiose** (D) Maltose
38. Hardness of water is due to the soluble salts of
(A) Sodium and potassium (B) Potassium and calcium
(C) Sodium and magnesium (D) **Calcium and magnesium**
39. The gas used for the artificial ripening of green fruits is
(A) Acetylene (B) **Ethylene** (C) Ethane (D) Methane
40. Which of the following metals pollutes the air of a city having automobiles?
(A) Cadmium (B) Chromium (C) **Lead** (D) Copper
41. The pH of a neutral solution is
(A) 0 (B) 1 (C) **7** (D) 9
42. Hydrogen, chloride gas is a/an
(A) Electrovalent compound (B) **Covalent compound**
(C) Complex molecule (D) Bondless compound
43. Name the Poison present in tobacco
(A) Conline (B) **Nicotine** (C) Theobromine (D) Narcotine
44. Which one of the following iron alloys cracks easily?
(A) Stainless steel (B) **Cast iron**
(C) Wrought iron (D) Mild steel
45. The isomer of glucose is
(A) **Fructose** (B) Formaldehyde (C) Dimethyl ether (D) Sugar
46. Tempered steel is used in making
(A) Coins (B) Rails (C) **Chisels** (D) Electric wires
47. The chemical used in match industry is
(A) **Red phosphorous** (B) White phosphorous
(C) Bone ash (D) Coke

48. Hydrogen was discovered by
(A) Lavoisier (B) Mendeleev (C) Madam Curie (D) **Cavendish**
49. Nitric acid is manufactured by
(A) Haber's process (B) **Ostwald process**
(C) Contact process (D) Resorts process
50. Ozone is
(A) A compound of oxygen (B) An isotope of oxygen
(C) **An allotrope of oxygen** (D) An isomer of oxygen
51. Basic principle of the hydrogen bomb is
(A) Radio activity (B) Chain reaction (C) **Nuclear fusion** (D) Nuclear fission
52. The charge on a proton is
(A) 1.6×10^9 C (B) 1.6×10^{19} C (C) 16×10^{19} C (D) **1.6×10^{-19} C**
53. The two isotopes of chlorine are ${}_{17}\text{Cl}^{35}$ and ${}_{17}\text{Cl}^{37}$; both of them contain
(A) The same number of electrons (B) The same number of protons
(C) Different number of neutrons (D) **All of these**
54. The metal which is found in liquid state at room temperature is
(A) Potassium (B) Copper (C) Iodine (D) **Mercury**
55. The major constituent of Super-phosphate of lime is
(A) Nitrogen (B) **Phosphorous** (C) Sulphur (D) Hydrogen
56. Electrovalent bond is formed between
(A) Two electropositive elements (B) **Two electronegative elements**
(C) Two atoms of the same element (D) Electropositive and electronegative elements
57. Of the following substances the one which can turn blue litmus paper to red is
(A) CH_3CHO (B) $\text{C}_{12}\text{H}_{22}\text{O}_{11}$ (C) **CH_3COOH** (D) $\text{C}_2\text{H}_5\text{OH}$
58. The element having only proton in the nucleus is
(A) **Hydrogen** (B) Deuterium (C) Tritium (D) Helium

59. pH of water is
(A) 4 **(B) 7** (C) 12 (D) 0
60. The sides of a match box contains
(A) Red phosphorous (B) White phosphorous
(C) Hydrofluoric acid (D) Hypochlorous acid
61. The acid which etches glass is
(A) Nitric acid (B) Sulphuric acid
(C) Hydrofluoric acid (D) Hypochlorous acid
62. Helium is preferred to hydrogen in airships because it
(A) Has greater lifting power (B) Is less dense
(C) Cheaper **(D) Does not form explosive mixture with air**
63. Which of the following has the smell of garlic?
(A) White phosphorous (B) Red phosphorous
(C) Phosphorous chloride (D) Phosphine
64. A common nitrogenous fertilizer is
(A) Urea (B) Super phosphate
(C) Triple phosphate (D) Potassium chloride
65. Which element is a metalloid in the following?
(A) Copper **(B) Arsenic** (C) Aluminium (D) Gold
66. Highest ionisation energies are found
(A) Inert Gases (B) Alkali metals (C) Transition metals **(D) Halogens**
67. The bonds present in acetylene are
(A) 3pi, 2 sigma bonds **(B) 2pi, 3 sigma bonds**
(C) 4pi, 1 sigma bonds (D) 1pi, 4 sigma bonds
68. When methyl orange is added to hydrochloric acid, it takes the colour
(A) Pink (B) Red (C) Blue (D) Yellow

69. The most abundantly found gas in atmosphere is
(A) **Nitrogen** (B) Hydrogen (C) Oxygen (D) Carbon-di-oxide
70. Spirit is
(A) **Methyl alcohol** (B) Ethyl alcohol (C) Propyl alcohol (D) Butyl alcohol
71. Among the following a fertilizer is
(A) Calcium sulphate (B) Magnesium sulphate
(C) Lead sulphate (D) **Ammonium sulphate**
72. In the modern periodic table, elements are classified on the basis of
(A) **Atomic number** (B) Atomic weight (C) Valency (D) Atomic size
73. Why is tungsten used in electric bulbs?
(A) It is cheaper than other metals (B) It is durable
(C) **It has high melting point** (D) It makes the bulb glow brighter
74. Radon is
(A) German radio (B) An explosive
(C) Artificial fibre (D) **Inert gas**
75. ----- is a synthetic polymer
(A) **PVC** (B) Protein (C) Cellulose (D) Starch
76. The element that shows maximum catenation is
(A) Silicon (B) **Carbon** (C) Lead (D) Tin
77. In covalent solids ----- occupy the lattice positions
(A) Molecules (B) Ions (C) Atoms (D) **Electrons**
78. Ice is ----- compound
(A) Ionic (B) Metallic (C) Molecular (D) **Covalent**
79. When silver tarnishes in air it turns black. This indicates that there is ----- in air.
(A) Helium (B) Carbon dioxide
(C) Carbon monoxide (D) **Hydrogen sulphide**

80. What is the black board chalk made of?
(A) Lime (B) Soft and sticky clay
(C) Petroleum waste (D) Calcium chloride
81. The substance that is not polymer is
(A) Nylon (B) Cellulose (C) Starch (D) Glucose
82. The main active ingredient of tea and coffee is
(A) Nicotine (B) Chlorophyll (C) Caffeine (D) Aspirin
83. Riboflavin is a/an
(A) Vitamin (B) Plant (C) Antibiotic (D) Pigment
84. The vitamin responsible for blood clotting is
(A) A (B) C (C) B₁₂ (D) K
85. The most abundantly found metal in the human body is
(A) Iron (B) Sodium (C) Calcium (D) Magnesium
86. Steel contains
(A) 0.1 to 2% carbon (B) 5 to 10% carbon
(C) No carbon (D) 20% carbon
87. Morphine is a/an
(A) Stimulant (B) Analgesic (C) Tranquiliser (D) Hypnotic
88. Air contains what percentage of oxygen?
(A) 28 (B) 37 (C) 47 (D) 21
89. An atom of iron is ----- times as heavy as an atom of hydrogen
(A) 23 (B) 8 (C) 55 (D) 238
90. Which is the gas emitted from the road vehicles causing pollution?
(A) Nitrogen oxide (B) Ozone
(C) Sulphur dioxide (D) Carbon monoxide
91. Which of the following compounds is responsible for acid rain?

- (A) Nitrogen dioxide **(B) Silicon dioxide**
(C) Sulphur dioxide (D) Carbon monoxide
92. Element discovered after Mendeleev's tabulation is
(A) Aluminium (B) Helium **(C) Germanium** (D) Iron
93. The food which gives an athlete instant energy is
(A) Glucose (B) Butter (C) Protein (D) Vitamin
94. Which is an example of an antibiotic?
(A) Sulphanilamide (B) Cortisone (C) Quinine **(D) Streptomycin**
95. Which of the following gases is known as laughing gas?
(A) Nitrous oxide (B) Nitrogen dioxide (C) Nitrogen (D) Nitrogen monoxide
96. The acid associated with the soaps is
(A) Sulphuric acid **(B) Fatty acid**
(C) Hydrochloric acid (D) Sulphonic acid
97. The substance used in making hair dye is
(A) Silver chloride (B) Silver bromine
(C) Silver iodine **(D) Silver nitrate**
98. The substance present in spurious liquors causing blindness is
(A) Ethanol **(B) Methanol** (C) Propanol (D) Butanol
99. The number of neutrons in ${}_{13}\text{Al}^{27}$ is
(A) 13 (B) 27 (C) 40 **(D) 14**
100. Avagadro's law is applicable to
(A) Solids (B) Solids and liquids
(C) Gases and liquids **(D) Gases**