

Time: 30 minutes

EVERYDAY SCIENCE : CHEMISTRY-NO.4

Marks: 100

1. The element found on the surface of the moon is
A. tin B. tungsten C. tantalum D. titanium
2. Paraffin wax used for making candles is obtained from ——
A. coal B. petroleum C. sea weeds D. shellac
3. —— is known as 'black diamond'.
A. petroleum B. platinum C. coal D. graphite
4. The average salinity of sea water is
A. 2% B. 2.5% C. 3% D. 3.5%
5. The main constituents of pearls are
A. calcium carbonate and aragonite
B. calcium oxide and ammonium chloride C. aragonite and conchiolin
D. calcium sulphate and sodium carbonate
6. Which of the following is the most stable element?
A. Uranium B. Hydrogen C. Oxygen D. Lead
7. Of the various forms of carbon, the one which is used for adsorption purpose, is
A. Diamond B. Graphite C. Coke D. Wood charcoal
8. Diamond is harder than graphite because
A. difference of layers of atoms B. tetrahedral structure of diamond
C. difference of crystalline structures D. None of these
9. Find the odd one
A. Marble B. Chalk C. Limestone D. Slaked lime
10. The process of conversion of a solid substance into a liquid as a result of absorption of water vapour from the air is ——
A. osmosis B. dessication C. efflorescence D. deliquescence
11. Which of the following ores does not contain iron?
A. Hematite B. Magnetite C. Limonite D. Cassiterite

12. Which gas is used for preparation of soda water?
 A. Ammonia B. Carbon dioxide C. Hydrogen D. Nitric oxide
13. The inert gas which is substituted for nitrogen in the air, used by deep sea divers for breathing, is
 A. Helium B. Argon C. Krypton D. Xenon
14. Which of the following are the ingredients of gun metal?
 A. Iron, Tin B. Copper, Tin, Zinc C. Iron, Brass, Tin D. Iron, Zinc, Titanium
15. The element required for solar energy conversion is
 A. germanium B. silicon C. uranium D. selenium
16. Chemical name of Caustic Soda is _____
 A. Sodium hydroxide B. Potassium hydroxide
 C. Sodium Carbonate D. Carbonic acid
17. Which of the following minerals has the lowest numerical hardness value 1?
 A. Talc B. Gypsum C. Apatite D. Topaz
18. The variety of coal in which the deposit contains recognisable traces of the original plant material is
 A. anthracite B. lignite C. peat D. bitumen
19. An element that does not occur in nature but they can be produced artificially is
 A. thorium B. radium C. plutonium D. uranium
20. Which of the following was to be discovered first in the chromosphere of the sun?
 A. Xenon B. Helium C. Neon D. Krypton
21. Temporary hardness of water is due to _____
 A. Calcium bicarbonate and Magnesium bicarbonate
 B. Calcium sulphate and Magnesium sulphate
 C. Calcium chloride and Magnesium chloride
 D. Washing soda and zeolites
22. Bell metal is an alloy of
 A. brass and nickel B. zinc and copper C. tin and copper D. nickel and copper
23. The metallic constituents of invar are
 A. Tin and Lead B. Copper and Nickel
 C. Iron and Chromium D. Iron and Nickel

24. Which of the following characteristics is not shown by hydrogen?
 A. It burns in air to form water. B. It supports combustion.
 C. It combines with almost all the metals forming hydrides.
 D. It readily combines with fluorine and chlorine and less readily with bromine, iodine, sulphur and phosphorus.
25. The gas that usually causes explosions in coal mines is
 A. hydrogen B. carbon monoxide C. air D. methane
26. Which of the following elements is obtained from sea cucumber?
 A. Argon B. Sulphur C. Vanadium D. Iodine
27. Amalgams are
 A. alloys which contain carbon
 B. alloys which have great resistance to abrasion
 C. alloys which contain mercury as one of the contents
 D. highly coloured alloys
28. When water freezes into ice, the volume ———
 A. increases B. decreases
 C. remains same D. first decreases and then increases
29. In fireworks, the green flame is produced because of
 A. mercury B. sodium C. potassium D. barium
30. Quartz crystals normally used in quartz clocks etc. is chemically
 A. sodium silicate B. germanium oxide C. silicon dioxide D. a mixture of (B) & (C)
31. Brass gets discoloured in air because of the presence of which of the following gases in air?
 A. Carbon dioxide B. Oxygen C. Hydrogen sulphide D. Nitrogen
32. Which among the following is a positively charged particle emitted by a radioactive element?
 A. Alpha ray B. Beta ray C. Gamma ray D. Cathode ray
33. All the following noble gases are present in the atmosphere, except ———
 A. Helium B. Argon C. Radon D. Iodine
34. In an atomic explosion, enormous energy is released which is due to the
 A. conversion of neutrons into protons
 B. conversion of chemical energy into heat energy
 C. conversion of mechanical energy into nuclear energy
 D. conversion of mass into energy

35. Which of the following is the strongest acid?
A. Hydrochloric acid B. Nitric acid
C. Acetic acid D. Sulphuric acid
36. Nuclear fission is caused by the impact of
A. proton B. electron C. neutron D. None of these
37. Atoms of an element differ from those of all other elements in
A. atomic number and electronic configuration
B. atomic number and number of valence electrons
C. number of neutrons and electronic configuration
D. number of neutrons and number of valence electrons
38. The difference between a nuclear reactor and an atom bomb is that
A.no chain reaction takes place in nuclear reactor while in the atomic bomb there is a chain reaction.
B. no chain reaction takes place in atomic bomb while it takes place in a nuclear reactor.
C. the chain reaction in nuclear reactor is not controlled.
D. the chain reaction in nuclear reactor is controlled.
39. Atom bomb is based on the principle of
A. nuclear fusion B. nuclear fission C. Both (A) & (b) above D. None of these
40. Which radioactive pollutant has recently drawn the attention of the public, due to its occurrence in the building material?
A. Radium B. Radon C. Thorium D. Plutonium
41. Which of the following types of photons has the highest energy?
A. Visible radiations B. Radio waves C. Gamma rays D. X-rays
42. What is the correct ascending order for frequencies of the following radiations?
1. Visible 2. X-rays 3. Ultraviolet 4. Radio waves
A. 1, 3, 2, 4 B. 3, 2, 4, 1 C. 4, 1, 3, 2 D. 4, 3, 1, 2
43. The poisonous substance seen in tapioca is —————
A. Hydrogen Cyanide B. Potassium Cyanide C. Methyl iso Cyanate D. Sodium Cyanide
44. Radioactivity disintegration of uranium ultimately results in formation of
A. radium B. thorium C. polonium D. lead
45. Which of the following is a good nuclear fuel?
A. Uranium-238 B. Neptunium-239 C. Thorium-236 D. Plutonium-239
46. How many colours the sunlight spectrum has?
A. Five B. Three C. Seven D. Four E. Nine

47. The chief ore of lead is ———
 A. Galena B. Horn silver C. Cinnabar D. Hammetite
48. Long distance photography is facilitated by
 A. Visible light B. X-rays C. Infrared rays D. Ultraviolet rays
49. Which of the following has the least penetrating power?
 A. Alpha particles B. Beta particles
 C. Gamma rays D. All have the same penetrating
50. Plaster of Paris is made from ———
 A. Marble B. Slaked lime C. Phosphate D. Gypsum
51. An organic sedimentary rock is ———
 A. coral B. limestone C. shale D. sandstone
52. Which fuel is used in spirit lamps?
 A. Benzene B. Ethyl alcohol C. Methanol D. Cyclohexanol
53. Who suggested that most of the mass of the atom is located in the nucleus?
 A. Thompson B. Bohr C. Rutherford D. None of these
54. The neutral atom's two isotopes differ in the number of
 A. electron shells B. protons C. valence electrons D. neutrons
55. A moderator is used in nuclear reactors in order to
 A. increase the number of neutrons B. decrease the number of neutrons
 C. slow down the speed of neutrons D. accelerate the neutrons
56. Most reactive element among the following is ———
 A. Flourine B. Iodine C. Oxygen D. Nitrogen
57. What is the increasing order of the wavelengths of the following colours?
 1. Orange 2. Indigo 3. Yellow 4. Violet
 A. 1, 2, 3, 4 B. 1, 3, 2, 4 C. 3, 1, 4, 2 D. 4, 2, 3, 1
58. The wavelength of X-rays is of the order of
 A. 1 cm B. 1 m C. 1 Angstrom D. 10 micron
59. Old-written material, which cannot be read easily, can be read by
 A. cosmic rays B. ultraviolet rays C. infra red rays D. None of these
60. The most lightest metal is ———
 A. Osmium B. Lithium C. Chromium D. Hydrogen

61. The Chemical name of Chilli Salt Peter is _____
 A. Sodium Nitrate B. Silver Nitrate C. Sodium Sulphate D. Sodium Carbonate
62. Mesons are found in
 A. rays B. Laser beam C. rays D. Cosmic rays
63. _____ is known as wood spirit
 A. Methyl alcohol B. Ethyl alcohol C. Benzyl alcohol D. Ethane
64. The main constituent of gobar gas is _____
 A. Ethane B. Methane C. Butane D. Pentane
65. The liquid which dissolves in coconut oil is _____
 A. Propane B. Butane C. Benzene D. Ethylene
66. The main important feature of neutron bomb is that when it is dropped on a city, it would damage
 A. both the living organisms and buildings B. the buildings but not the living organisms
 C. the living organisms but spare buildings D. None of these
67. _____ is known as “philosopher’s wool”
 A. Zinc Oxide B. Zinc Sulphide C. Zinc Chloride D. Zinc Phosphate
68. Which of the following are most penetrating?
 A. α -rays B. β -rays C. γ -rays D. δ -rays
69. The dark lines in the solar spectrum are due to
 A. absorption of corresponding wavelengths by the prism used in the spectrograph.
 B. destructive interference between waves of certain definite wavelengths.
 C. absorption of corresponding wavelengths by the outer layers of the sun.
 D. absence of corresponding wavelengths from the light emitted by the core of the sun.
70. Enriched uranium used in a nuclear reactor is
 A. uranium freed of all impurities
 B. uranium treated with radiation
 C. uranium alloyed with aluminium
 D. uranium with a high percentage of a particular isotope
71. Atoms are composed of
 A. electrons only B. protons only
 C. electrons and protons D. electrons and nuclei
72. Earliest known acid is _____
 A. Acetic acid B. Sulphuric acid C. Tartaric acid D. Hydrochloric acid

73. The gas which causes 'green house effect' is ————
 A. Oxygen B. Carbon dioxide C. Hydrogen sulphide D. Nitrogen
74. The process by which Magnesium was extracted from sea water
 A. Electrolysis B. Dow Process C. Fermentation D. Reduction
75. Which of the following is used as a moderator in nuclear reactor?
 A. Ordinary water B. Radium C. Thorium D. Graphite
76. Which of the following colours in the visible spectrum has maximum range?
 A. Violet B. Indigo C. Orange D. Red
77. Which of the following elements is non-radioactive?
 A. Uranium B. Thorium C. Plutonium D. Zirconium
78. The age of most ancient geological formations is estimated by
 A. Potassium-argon dating B. Ra-Si dating
 C. C-14 dating D. Uranium-lead dating
79. Isotopes are separated by
 A. filtration B. sublimation C. distillation D. crystallisation
80. Optic fibres are mainly used for which of the following?
 A. Communication B. Weaving
 C. Musical instruments D. Food Industry E. Eye surgery
81. The Calcium compound present in bones is ————
 A. Calcium oxide B. Calcium sulphide
 C. Calcium phosphate D. Calcium carbonate
82. Which variety of glass is heat resistant?
 A. Hard glass B. Flint glass C. Pyrex glass D. Bottle glass
83. What are soaps?
 A. salts of silicates
 B. Esters of heavy fatty acids
 C. Sodium or potassium salts of heavier fatty acids
 D. Mixture of glycerol and alcohols
84. The first synthetic fibre made by man was
 A. rayon B. nylon C. polyester D. terycott

85. Which of the following is used as a filler in rubber tyres?
 A. Graphite B. Coal C. Coke D. Carbon black
86. Which of the following are thermosetting plastics?
 1. Melamine 2. PVC 3. Bakelite
 A. 1 and 2 B. 2 and 3 C. 1 and 3 D. 1, 2 and 3
87. The element which is used in atomic clocks is _____
 A. Titanium B. Cesium C. Vanadium D. Lithium
88. Which is/are the important raw material(s) required in cement industry?
 A. Limestone B. Gypsum & clay
 C. Clay D. Limestone & clay
89. Bagasse, a by-product of sugar manufacturing industry, is used for the production of
 A. nylon B. glass C. paper D. alcohol
90. Which synthetic fibre possesses a “drip-dry” property?
 A. Rayon B. Nylon C. Silk D. Terylene
91. Gypsum is added to cement clinker to
 A. increase the tensile strength of cement
 B. bind the particles of calcium silicate
 C. decrease the rate of setting of cement
 D. facilitate the formation of colloidal gel
92. Which type of fire extinguisher is used for petroleum fire?
 A. Foam type B. Soda acid type C. Powder type D. None of these
93. Which of the following fertilisers leaves acidic residue?
 A. Urea B. Ammonium phosphate
 C. Ammonium sulphate D. Sulphate of potash
94. The perfuming agent which is commonly used in Nail Polish is _____
 A. Acetone B. Mercury Amalgam C. Camocite D. Chalcophite
95. In vulcanisation, natural rubber is heated with
 A. Carbon B. Sulphur C. Silicon D. Phosphorus
96. Hydrogen was discovered by _____
 A. Joseph Aspedin B. Henry Cavandish
 C. Joseph Preistley D. Joseph Black
97. Which of the following is used in making artificial sweetener saccharin?
 A. Benzene B. Toluene C. Phenol D. Aniline

98. Which of the following is used for removing air bubbles from glass during its manufacture?
A. Feldspar
B. Arsenious oxide
C. Potassium carbonate
D. Soda ash
99. Rayon is chemically
A. glucose
B. amylose
C. cellulose
D. pectin
100. Retinol is the chemical name of
A. Vitamin A
B. Vitamin D
C. Vitamin E
D. Vitamin K

ANSWERS

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|-------|-------|-------|--------|-------|-------|-------|-------|
| 1. D | 2. B | 3. C | 4. D | 5. A | 6. D | 7. D | 8. C |
| 9. D | 10. D | 11. D | 12. B | 13. A | 14. B | 15. B | 16. A |
| 17. D | 18. C | 19. C | 20. B | 21. A | 22. C | 23. D | 24. B |
| 25. D | 26. C | 27. C | 28. A | 29. D | 30. C | 31. C | 32. A |
| 33. C | 34. D | 35. D | 36. C | 37. A | 38. D | 39. B | 40. C |
| 41. C | 42. C | 43. A | 44. D | 45. D | 46. C | 47. A | 48. C |
| 49. A | 50. D | 51. C | 52. B | 53. C | 54. D | 55. C | 56. A |
| 57. D | 58. C | 59. C | 60. B | 61. A | 62. D | 63. A | 64. B |
| 65. C | 66. C | 67. A | 68. C | 69. C | 70. D | 71. D | 72. A |
| 73. C | 74. B | 75. D | 76. D | 77. D | 78. C | 79. C | 80. A |
| 81. C | 82. C | 83. C | 84. B | 85. D | 86. C | 87. B | 88. D |
| 89. C | 90. B | 91. C | 92. C | 93. C | 94. A | 95. B | 96. B |
| 97. B | 98. B | 99. C | 100. C | | | | |