1. Large amounts of atomic hydrogen are present in the atmosphere of_____.
(a) Earth (b) Sun (c) Moon (d) None of these

2. Hydrogen atom contains_____electrons.
(a) One electron (b) Two electrons (c) Four electrons (d) None of these

3. During the electrolysis of water hydrogen is liberated at the_____.
(a) Anode (b) Cathode
(c) Anode and cathode both (d) None of these

4. The atomic weight of hydrogen is_____.
(a) 1.00 a m u (b) 1.008 a. m .u (c) 6.0 a. m. u (d) None of these

5. In nature hydrogen exists in_____.
(a) Gaseous state (b) Solid state (c) Liquid State (d) Plasma state

6. _____is the lightest gas.
(a) Nitrogen (b) Helium (c) Oxygen (d) Hydrogen

7. Hydrogen generally combines with other elements to form_____.
(a) Ionic bond (b) Covalent bond (c) Polar bond (d) None of these

8. The atoms of the same element, which have the same atomic number but different massnumbers, are called__.
(a) Isotopes (b) Actinides (c) Isobar (d) None of these

9. A tritium nucleus has_____.
(a) One proton and two electrons (b) One proton and two neutrons
(c) One neutrons and two protons (d) One proton and three neutrons

10. Physical properties of elements depend upon the number of_____.
(a) Protons in the nucleus (b) Neutrons in the nucleus
(c) Electrons in the valence shell (d) Both protons and neutrons in the nucleus

11. Chemical properties of elements depend upon the number of_____.
(a) Electrons in the valence shell (b) Protons in the nucleus
(c) Neutrons in the nucleus (d) Protons and neutrons in the nucleus

12. Hydrogen is an important constituent of_____.
(a) Water (b) Petroleum (c) Natural gas (d) All of these

13. Carbon and silicon are the first two members of_____group elements in the periodictable.
(a) III A (b) IV A (c) II A (d) I A

14. Carbon and silicon contain_____electrons in their valence shells.
(a) Four (b) Five (c) Six (d) Two

15. Carbon and silicon form four___bonds when combine with other elements.
(a) Ionic (b) Co-ordinate covalent (c) Covalent (d) None of these

16. Diamond, graphite and bucky balls are the three _____forms of carbon.
(a) Amorphous (b) Crystalline (c) Solid (d) Allotropic

17. Coke, coal and lampblack are the_____forms of carbon.
(a) Amorphous (b) Crystalline (c) Solid (d) Allotropic

18. Diamond crystal is usually_____in shape.
(a) Tetrahedral (b) Octahedral (c) Cubical (d) All of these

19. Graphite occurs naturally as _____
(a) Bort (b) Carbando (c) Plumb ago (d) All of these

20. _is a bad conductor of electricity.
(a) Graphite (b) Silicon (c) Oxygen (d) Diamond

21. Graphite is a_____conductor of electricity.
(a) Good (b) Bad (c) Week (d) Moderate

22. Silicon is the second most_____element in the earth's crust after_____.
(a) Oxygen, abundant (b) Hydrogen, abundant (c) Carbon, scarce (d) None of these

23. The molecular formula of sand is_____.
(a) SiO_3 (b) SiO_2 (c) Si (d) SiO_4

24. Nitrogen is present up to_____% by volume in the earth's atmosphere.
(a) 78 (b) 82 (c) 88 (d) 62

25. Nitrogen was discovered by a Scotish Botanist_____.
(a) Robert Clay (b) Daniel Rutherford (c) Bohr (d) Charles

26. Nitrogen belongs to_____group in the periodic table.
(a) IIA (b) IIIA (c) VIA (d) VA

27. Nitrogen contains___ electrons its valence shell.
(a) 1 (b) 3 (c) 5 (d) 7

28. Oxygen contains____electrons in its valence shell.
(a) 1 (b) 2 (c) 4 (d) 6

29. Oxygen constitutes about____% by mass of water present on earth's surface.
(a) 78.8 (b) 88.8 (c) 98.8 (d) 11.2

30. _____is the most abundant element on earth's crust.
(a) Hydrogen (b) Nitrogen (c) Oxygen (d) Carbon

31. The atomic number of sulphur is___while atomic mass is_____a.m.u.
(a) 16, 32 (b) 8, 16 (c) 9, 19 (d) 11, 23

32. _____recognized sulphur as an element.
(a) Rutherford (b) Pascal (c) Lavoiser (d) Dalton

33. The existence of an element in two or more different forms in the same physical state is called _____.
(a) Allotropes (b) Allotropy (c) Modification (d) Ore

34. The elements, which exist in two or more forms and differ only in their physical structure arecalled_____.
(a) Allotropes (b) Allotropy (c) Modification (d) Ore

35. Rhombic sulphur is_____crystalline solid.
(a) Diagonal (b) Hexagonal (c) Tetraahedral (d) Octahedral

36. Monoclinic sulphur is_____like crystalline solid.
(a) Needle (b) Square (c) Cubic (d) Powder

37. The temperature at which both rhombic sulphur and monoclinic sulphur forms coexist inequilibrium is called as_temperature.
(a) Threshold (b) Transition (c) Fixed (d) Low

38. The transition temperature of sulphur is____^{o}C.
(a) 96 (b) 94 (c) 94.5 (d) 100

39. _____sulphur is non-crystalline form of sulphur.
(a) Monoclinic (b) Rhombic (c) Plastic (d) None of these

40. The_____are the VIIA group elements in the periodic table.
(a) Halogens (b) Nobel gases (c) Inert gases (d) Alkaline

41. Halogens are the_____producing elements.
(a) Alcohol (b) Salt (c) Water (d) Base

42. _____is the member of halogen family is radioactive.
(a) Chlorine (b) Fluorine (c) Bromine (d) Astatine

43. Halogens exists as_____molecules.
(a) Monoatomic (b) Triatomic (c) Diatomic (d) Polyatomic

44. Halogens contain_____electrons in their valence shell.
(a) Three (b) Four (c) Six (d) Seven

45. Halogens are so_____ that they cannot exist in free state in nature.
(a) Reactive (b) Unreactive (c) Stable (d) Unstable

46. Sea water contains about_____ NaCl.
(a) 30% (b) 3% (c) 0.3% (d) 0.03%

47. _____is the dark brown volatile liquid.
(a) Fluorine (b) Chlorine (c) Bromine (d) Iodine

48. _____is the black shining low melting solid.
(a) Fluorine (b) Chlorine (c) Bromine (d) Iodine

49. _____can replace all other halogens from the solution of their salts.
(a) Silver (Ag) (b) Gold (Au) (c) Mercury (Hg) (d) Sodium (Na)

50. I_2 dissolved in alcohol is called_____.
(a) Iodine (b) Tincture (c) Water (d) None of these

51. _____in the periodic table are classified mainly as metals and non-metals.
- Elements (b) Gases (c) Solids (d) Liquids

52. All metals except_____are solids.
- Nitrogen (b) Iron (c) Mercury (d) Oxygen

53. Metals give off notes while hitting with hammer, this property of metal is known as _____.
(a) Conductor (b) Sonorous (c) Electrolyte (d) None of these

54. Metals have great_____strength.
- Fragile (b) Ductile (c) Tensile (d) None of these

55. _____is considered as light metal.
- Nitrogen (b) Lithium (c) Calcium (d) Carbon

a

56. _____Chemistry is the study of carbon containing compounds.
(a) Organic (b) Inorganic (c) Industrial (d) Environmental

57. Compounds consisting of_____and_____are known as hydrocarbons.
(a) Carbon, Oxygen (b) Carbon, Hydrogen
(c) Hydrogen, Oxygen (d) Oxygen, Nitrogen

58. There are_____major kinds of hydrocarbons.
(a) Three (b) Four (c) Five (d) Six

59. _____theory was based on source but not on composition.
(a) Graham's (b) Ohm's (c) Maxwell (d) Vital force

60. _____converted an inorganic compound (ammonium cyanate) into an organic compound(urea)
(a) Wohler (b) Archimedes (c) Kolbe (d) Boyle

61. Kolbe synthesized acetic acid a chief component of_____.
(a) Curd (b) Vinegar (c) Acid (d) Base

62. The formula for urea is_____.
(a) $NH_2–C–NH_2$ (b) $NH_2–CH_3–NH_2$ (c) $NH_2–CO–NH_2$ (d) NH_4 CNO

63. Hydrocarbons, which contain single bonds, are called_____.
(a) Alkanes (b) Alkenes (c) Alkynes (d) None of these

64. Hydrocarbons, which contain double bonds, are called_____.
(a) Alkanes (b) Alkenes (c) Alkynes (d) None of these

65. Hydrocarbons, which contain triple bonds, are called_____.
(a) Alkanes (b) Alkenes (c) Alkynes (d) None of these

66. Sodium hydroxide is prepared at large scale by the following methods.
(a) **Electrolytic process** (b) Saponification method
(c) Hydrolysis (d) Dehydration

67. Sodium hydroxide at 318 °C:
(a) Melts with decomposition (b) Does not melt
(c) Melts to a clear liquid (d) Converts to gas

68. Carbondioxide and sodium hydroxide react to give:
(a) **Sodium carbonate and water** (b) Sodium carbonate only
(c) Sodium metal and water (d) Sodium and carbon monoxide

69. When sodium hydroxide reacts with ammonium chloride, it liberates gas:
(a) Carbon dioxide (b) Hydrogen
(c) Oxygen **(d) Ammonia**

70. Sodium hydrogen carbonate used in medicine which of the effects it causes in the stomach?
(a) Increase the basicity (b) Increase the acidity
(c) Neutralize the acidity (d) Decrease the basicity

71. The product/products obtained by reaction of sodium carbonate with carbon dioxide in aqueousmedium is/are:
(a) Sodium hydroxide **(b) Sodium hydrogen carbonate**
(c) Sodium carbonate and water (d) Sodium oxide

72. Carbonates and bicarbonate of sodium are manufactured by:
(a) Contact method **(b) Ammonia solvay process**
(c) Ostwald's process (d) Haber's method