

- The refractive index of a transparent medium is always greater than _____.
a) two b) four c) one d) three
- To produce a displacement _____ is required.
a) mass b) force c) energy d) none of the above
- Magnification of a convex lens is _____.
a) positive b) negative
c) either positive or negative d) zero
- One kilogram force is equal to _____.
a) 9.8 dyne b) 98×10^4 dyne
c) 9.8×10^4 dyne d) 980 dyne
- The eye defect presbyopia can be corrected by _____.
a) convex lens b) concave lens
c) convex mirror d) Bi focal lenses
- The value of universal gas constant _____.
a) $3.81 \text{ mol}^{-1}\text{k}^{-1}$ b) $8.03 \text{ mol}^{-1}\text{k}^{-1}$
c) $1.38 \text{ mol}^{-1}\text{k}^{-1}$ d) $8.31 \text{ Jmol}^{-1}\text{k}^{-1}$
- SI unit of resistance is _____.
a) mho b) joule c) ohm d) ohm meter
- The value of Avogadro number _____.
a) $6.023 \times 10^{23} \text{ mol}^{-1}$ b) $6.023 \times 10^{-23} \text{ mol}^{-1}$
c) $6.023 \times 10^{23} \text{ mol}$ d) $6.023 \times 10^{23} \text{ m}^{-1}$
- The wiring in a house consists of _____ circuits.
a) parallel b) series
c) both a and b d) none of the above
- Amount of light entering into the eye is controlled by _____.
a) Pupil b) Retina c) Iris d) Cornea
- Inertia of a body depends on _____.
a) weight of the object
b) acceleration due to gravity of the planet
c) mass of the object
d) Both (a) and (b)
- Kamini reactor is located at _____.
a) Kalpakkam b) Koodankulam
c) Mumbai d) Rajasthan
- The frequency which is audible to the human ear is _____.
a) 50KHZ b) 20 KHZ c) 15000 KHZ d) 10000 KHZ
- Kilo Watt hour is the unit of _____.
a) resistivity b) conductivity
c) electrical energy d) electrical power
- The ratio of the potential difference to the current is known as _____.
a) current b) voltage c) potential d) resistance
- Rapid back and forth motion of a particle about its mean position is called _____.
a) sine wave b) longitudinal wave
c) frequency d) none of the above
- _____ aprons are used to protect us from gamma radiations.
a) Lead Oxide b) Iron c) Lead d) Aluminium
- _____ has the greatest penetration power.
a) α rays b) β rays
c) both (a) and (b) d) Gamma rays
- _____ isotope is used for the treatment of cancer.
a) Radio Nickel b) Radio Cobalt
c) Radio Carbon d) Radio Nickel
- Proton-Proton chain reaction is an example of _____.
a) Nuclear fission b) α - decay
c) Nuclear fusion d) β -decay
- The unit of 'g' is ms^{-2} . It can be also expressed as _____.
a) cms^{-1} b) Nkg^{-1} c) $\text{Nm}^2\text{kg}^{-1}$ d) cm^2S^{-2}
- Impulse is equal to _____.
a) rate of change of momentum b) rate of force and time
c) change of momentum d) rate of change of mass
- A man of mass 100kg has a weight of _____ as the surface of the Earth.
a) 100N b) 620 N c) 980N d) 9.8 N

24. In a myopic eye, the image of the object is formed _____.
 a) behind the retina b) on the retina
 c) in front of the retina d) on the blind spot
25. If a substance is heated or cooled, the change in mass of that substance is _____.
 a) positive b) zero c) negative d) none of the above
26. Artificial radioactivity was discovered by _____.
 a) Becquerel b) Irene Curie c) Roentgen d) Neils Bohr
27. The velocity of sound is _____ in gases than in liquids.
 a) high b) low c) same d) moderate
28. The radio isotope of _____ helps to increase the productivity of crops.
 a) Cobalt b) Phosphorous c) Iron d) Iodine
29. _____ is the amount of radiation that may cause death of a person when exposed to it.
 a) 6000R b) 500R c) 200R d) 100R
30. _____ is used to measure exposure rate of radiation in humans.
 a) Ammeter b) Voltmeter c) Both (a) and (b) d) Dosimeter
31. The volume occupied by 1 mole of a diatomic gas at S.T.P is _____.
 a) 11.2 litre b) 5.6 litre c) 22.4 litre d) 44.8 litre
32. Noble gases are _____ Atomic.
33. 35.5g of Cl_2 contains _____ mole.
34. The sum of the number of protons and neutrons of an atom is called its _____.
35. Molar mass of CO_2 is _____g.
36. % of oxygen in CaCO_3 is _____.
37. The chemical name of rust is _____.
38. _____ forms the basis of modern periodic table.
39. $\text{Fe}_2\text{O}_3 + 3\text{CO} \xrightarrow{400^\circ\text{C}}$ _____.
40. In the Aluminothermic process the role of Al is _____.
 a) Oxidising agent b) Reducing agent
 c) Hydrogenating agent d) Sulphurising agent
41. The formula for Blue vitriol is _____.
42. Volume percentage decreases with increase in temperature of _____.
43. Solubility of NaCl in 100ml water is 36g. If 25g of salt is dissolved in 100ml of water how much more salt is required for saturation? _____.
 a) 12g b) 11g c) 16g d) 20g
44. If false, correct the statement
 The molecular formula of green vitriol is $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$,
45. Find the odd one out
 a) $\text{H}_2 + \text{Cl}_2 \rightarrow 2\text{HCl}$ b) $\text{C} + \text{O}_2 \rightarrow \text{CO}_2 + \text{Heat}$
 c) $\text{HCl} + \text{NaOH} \rightarrow \text{NaCl} + \text{H}_2\text{O}$ d) $\text{SiO}_2 + \text{CaO} \rightarrow \text{CaSiO}_3$
46. A reaction between carbon and oxygen is represented by $\text{C}_{(s)} + \text{O}_{2(g)} \rightarrow \text{CO}_{2(g)} + \text{Heat}$. In which of the type (s), the above reaction can be classified?
 i) Combination ii) Combustion Reaction
 iii) Decomposition iv) Irreversible Reaction
 a) (i) and (ii) b) (i) and (iv) c) (i) (ii) and (iii) d) (i), (ii) and (iv)
47. The ion formed by dissolution of H^+ in water is called _____.
48. The p^{H} of 1.0×10^{-4} molar solution of HNO_3 is _____.
49. The p^{H} of 1×10^{-5} molar solution of KOH is _____.
50. CH_3COCH_3 _____.
51. HCOOH _____.
52. $\text{CH}_3\text{CH}_2\text{CH}_2\text{CHO}$ _____.
53. $\text{CH}_3-\underset{\text{CH}_3}{\text{CH}}-\text{CH}_2-\text{OH}$ _____.
54. The molecular formula of an open chain organic compound is C_3H_6 . The class of the compound is _____.
55. The general molecular formula of alkynes is _____.
56. Rectified spirit is an aqueous solution which contains about _____ of ethanol.
 a) 95.5% b) 75.5% c) 55.5% d) 45.5%

57. Which of the following pairs can be the successive members of a homologous series?
 a) C_3H_8 and C_4H_{10} b) C_2H_2 and C_2H_4
 c) CH_4 and C_3H_6 d) C_2H_5OH and C_4H_8OH
58. Ethanoic acid turns _____ litmus to _____.
59. Dehydration of ethanol by conc. H_2SO_4 forms _____.
60. The alkaline Hydrolysis of fatty acids is termed as _____.
61. Casparian strips are present in the _____ of the root.
 a) cortex b) pith c) pericycle d) endodermis
62. Kreb's cycle takes place in _____.
 a) chloroplast b) mitochondrial matrix
 c) stomata d) inner mitochondrial membrane
63. Artificial photosynthesis is a method for producing renewable energy by the use of _____.
 a) sunlight b) carbon-di-oxide c) water d) oxygen
64. When xylem and phloem are arranged side by side on the same radius, it is called _____.
 a) radial b) amphivasal c) conjoint d) none of these
65. The segments of leech are known as _____.
 a) metameres b) proglottids c) strobila d) all the above
66. The brain of leech lies above the _____.
 a) mouth b) buccal cavity c) pharynx d) crop
67. The animals which give birth to young ones are called _____.
 a) oviparous b) viviparous c) ovoviviparous d) all the above
68. During transpiration, there is loss of _____.
 a) carbon di oxide b) oxygen c) water d) none of the above
69. The wall of human heart is made of
 a) Endocardium b) Epicardium
 c) myocardium d) all the above
70. Heart of heart is called _____.
 a) SA node b) AV node c) Purkinje fibres d) Bundle of His
71. _____ is the largest of the leucocytes.
 a) Monocytes b) Lymphocytes
 c) Basophils d) Eosinophils
72. Bipolar neurons are found in _____.
 a) ratina of eye b) cerebral cortex
 c) embryo d) respiratory epithelium
73. In man, there are _____ pair of cranial nerves and _____ pair of spinal nerves.
 a) 12, 31 b) 31, 12 c) 12,13 d) 12, 21
74. Nerve cells do not possess _____.
 a) neurilemma b) sarcolemma c) axon d) dendrites
75. Nodes of Ranvier is found in _____.
 a) muscles b) axons c) dendrites d) cyton
76. Arena coleoptile test was conducted by _____.
 a) F.W. Went b) Paal c) N.Smit d) Darwin
77. LH is secreted by _____.
 a) Adrenal gland b) Thyroid gland
 c) Anterior pituitary d) Hypothalamus
78. To increase the sugar production in sugarcanes, they are sprayed with _____.
 a) auxin b) cytokinin c) Gibberellins d) ethylene
79. _____ is referred as master gland.
 a) Pineal gland b) Pituitary gland
 c) Adrenal gland d) Thyroid gland
80. Asexual reproduction takes place through budding in _____.
 a) Amoeba b) Yeast c) Plasmodium d) Bacteria
81. The non-essential parts of a flower are _____.
 a) calyx and corolla b) calyx and androecium
 c) corolla and gynoecium d) androecium and gynoecium
82. Oestrogen is secreted by _____.
 a) anterior pituitary b) primary follicle
 c) graffian follicle d) corpus luteum
83. Syngamy results in the formation of _____.
 a) zoospores b) conidia c) zygote d) chlamyospores
84. Which one of the following is an IUCD?
 a) Copper - T b) Oral Pills
 c) Diaphragm d) Tubectomy

85. 9:3:3:1 ratio is due to _____.
a) segregation b) crossing over
c) independent assortment d) recessiveness
86. When an individual bears more than the usual number of diploid (2n) chromosomes then, it is called as _____.
a) Euploidy b) Aneuploidy c) Tetraploidy d) Polyploidy
87. Okasaki fragments are joined together by _____.
a) Helicase b) DNA ligase
c) RNA Primer d) DNA Polymerase
88. When the centromere is found on the proximal end, then it is called _____ chromosome.
a) Metacentric b) Sub-metacentric
c) Acrocentric d) Telocentric
89. _____ is the only planet in the goldilock zone.
a) Mars b) Earth c) Venus d) Pluto
90. The use and disuse theory was proposed by _____.
a) Charles Darwin b) Ernst Haeckel
c) Jean Baptiste Lamarck d) Gregor Mendel
91. The term Ethnobotany was coined by _____.
a) Khorana b) J.W Harsbberger
c) Ronald Ross d) Hugo devries
92. Wing of a bat and wing of an insect is an example for _____ organs.
a) Homologous b) Analogous
c) vestigial d) none of these
93. Father of green revolution
a) Dr. M.S Swaminathan b) Dr. Norman E. Borlaug
c) Dr. G. Nammalvar d) Dr. Ian Wilmut
94. _____ is a new breed of sheep developed in Punjab by crossing Bikaneri (Magra) ewes and Australian Marino rams.
a) Hissardale b) Brown Swiss c) Sahiwal d) Jersey
95. The miracle rice which saved millions of lives and celebrated its 50th Birthday is _____.
a) IR 8 b) IR 24 c) Ponni d) Atomita - 2
96. _____ is celebrated as world cancer day.
a) 4th February b) 26th June c) 1st December d) 28th May
97. Which type of cancer affect lymph nodes and spleen?
a) carcinoma b) sarcoma c) leukemia d) cymphoma
98. World's largest and tallest wind turbine is situated in _____.
a) Cambay b) Hawaii c) Denmark d) Ireland
99. Common energy source in village is _____.
a) electricity b) coal c) biogas d) wood and animal dung
100. Global warming will cause _____.
a) raise in level of oceans b) melting of glaciers
c) sinking of islands d) all of these