

Delhi CET 2019 Question Paper

Time Allowed :2 Hours	Maximum Marks :600	Total questions :150
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General Instructions

Read the following instructions very carefully and strictly follow them:

1. **Mode of Examination:** Online (Computer Based exam)
2. **Number of Questions:** 150
3. **Type of Questions:** MCQ (Multiple Choice Questions)
4. **Duration:** 2 hours
5. **Negative Marking:** - 1 mark

1. The area of the triangle with vertices $(0, 0)$, $(6, 0)$, and $(0, 5)$ is:

- (1) 11 Square units
 - (2) 12 Square units
 - (3) 13 Square units
 - (4) 15 Square units
-

2. The value of p for which the points $(-5, 1)$, $(1, p)$, and $(4, -2)$ are collinear is:

- (1) 1
 - (2) -2
 - (3) -1
 - (4) 3
-

3. If $(1 + \cos A)(1 - \cos A) = \frac{3}{4}$, then the value of $\sec A$ is :

- (1) 1
 - (2) 3
 - (3) 2
 - (4) 4
-

4. If $\tan \theta + \frac{1}{\tan \theta} = 2$, then the value of $\tan^2 \theta + \frac{1}{\tan^2 \theta}$ is:

- (1) 2
 - (2) 3
 - (3) 4
 - (4) 5
-

5. $\sin 2A = 2 \sin A$ is true when A is equal to:

- (1) 0°
 - (2) 30°
 - (3) 45°
 - (4) 60°
-

6. If $\sec(7^\circ - 2\alpha) = \csc(5\alpha - 7^\circ)$, then the value of α is:

- (1) 60°

- (2) 50°
 - (3) 40°
 - (4) 30°
-

7. The angle of elevation of a 15 m high tower from a point 15 m away from its foot is:

- (1) 30°
 - (2) 45°
 - (3) 60°
 - (4) 90°
-

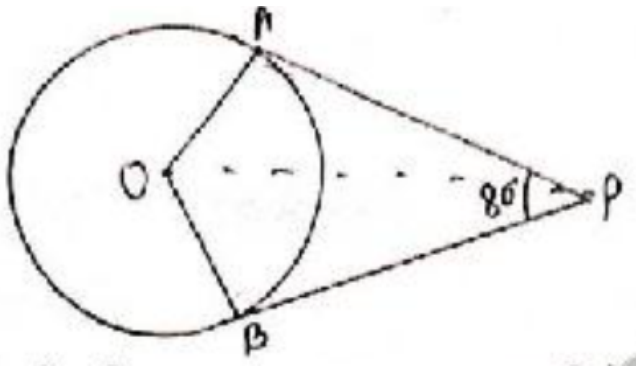
8. If the angle of elevation of the top of a tower from a point on the ground, which is 30 m away from the foot of the tower is 30° , then the height of the tower is :

- (1) $9\sqrt{3}$ m
 - (2) $10\sqrt{3}$ m
 - (3) $11\sqrt{3}$ m
 - (4) $13\sqrt{3}$ m
-

9. A tangent PQ at a point P of a circle of radius 5 cm meets a line through the centre O at a point Q So that $OQ=12$ cm, height PQ is :

- (1) 12 cm
 - (2) 13 cm
 - (3) 8.5 cm
 - (4) $\sqrt{119}$ cm
-

10. If tangents PA and PB from a point P to a circle with centre O are inclined to each other at angle of 80° in the fig, then $\angle POA$ is equal to :



- (1) 50°
- (2) 60°
- (3) 70°
- (4) 80°

11. To draw a pair of tangents to a circle which are inclined to each other at an angle of 50° , it is required to draw tangents at end points of those two radii of the circle. What should be the angle between these two radii?

- (1) 150°
- (2) 140°
- (3) 130°
- (4) 120°

12. If the perimeter of a circle is equal to that of a square, then find the ratio of their areas.

- (1) 11 : 14
- (2) 5 : 6
- (3) 14 : 11
- (4) 7 : 8

13. The length of an arc of a circle of radius 12 cm is 10π . Find the central angle of this arc.

- (1) 160°
- (2) 150°
- (3) 140°

(4) 130°

14. If a cone of height h and a sphere have same radii r and same volume, then $r:h$ will be:

(1) 4:1

(2) 1:4

(3) 2:3

(4) 3:2

15. The empirical relationship among the three measures of central tendency (median, mode, and mean) is:

(1) $2 \cdot \text{Median} = 3 \cdot \text{Mode} + \text{Mean}$

(2) $\text{Median} = \text{Mode} + 2 \cdot \text{Mean}$

(3) $2 \cdot \text{Mode} = 3 \cdot \text{Median} + \text{Mean}$

(4) $2 \cdot \text{Mean} = 3 \cdot \text{Median} + 2 \cdot \text{Mode}$

16. If the median of the series exceeds the mean by 3, then the number by which the mode exceeds its mean is:

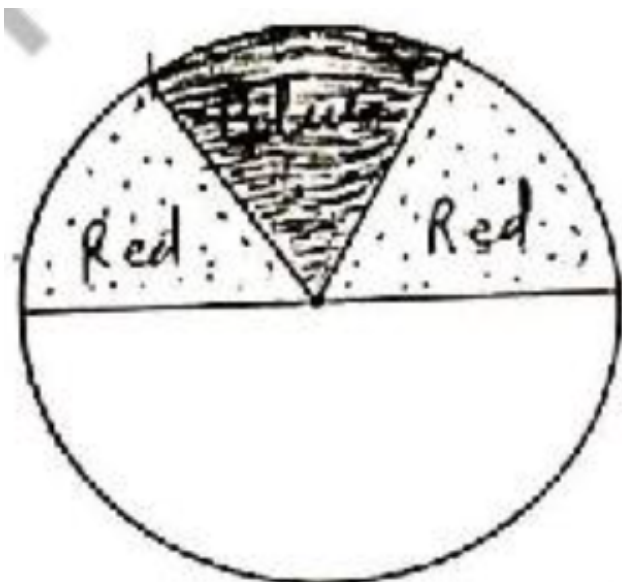
(1) 8

(2) 9

(3) 10

(4) 11

17. A student observes the following spinner. What is the probability of obtaining the red colour.



- (1) $\frac{2}{3}$
- (2) $\frac{1}{3}$
- (3) $\frac{5}{3}$
- (4) $\frac{7}{3}$

18. Which of the following cannot be the probability of an event?

- (1) $\frac{2}{3}$
- (2) -1.5
- (3) 20%
- (4) 0.7

19. One card is drawn from a well-shuffled deck of 52 cards. The probability of getting a face card is:

- (1) $\frac{1}{26}$
- (2) $\frac{3}{13}$
- (3) $\frac{3}{26}$
- (4) $\frac{1}{52}$

20. A dice is thrown twice. The probability that 5 will not come up either time is:

- (1) $\frac{11}{36}$
- (2) $\frac{25}{36}$

(3) $\frac{13}{36}$

(4) $\frac{17}{36}$

21. An irrational number between 2 and 2.5 is:

(1) $\sqrt{11}$

(2) $\sqrt{5}$

(3) $\sqrt{22.5}$

(4) $\sqrt{12.5}$

22. The value of m for which $\left[\left\{ \left(\frac{1}{7^2} \right)^{-2} \right\}^{-\frac{1}{3}} \right]^{\frac{1}{4}} = 7^m$ is:

(1) $-\frac{1}{3}$

(2) $\frac{1}{4}$

(3) -3

(4) 2

23. If $\sqrt{13 - a\sqrt{10}} = \sqrt{8} + \sqrt{5}$ then a =

(1) -5

(2) -6

(3) -4

(4) -2

24. If $\frac{a}{b} + \frac{b}{a} = 1$, then $a^3 + b^3 =$

(1) 1

(2) -1

(3) $\frac{1}{2}$

(4) 0

25. The value of $\frac{(2.3)^3 - 0.027}{(2.3)^2 + 0.69 + 0.09}$ is:

(1) 2

(2) 3

(3) 2.327

(4) 2.273

26. If $(x^{140} + 2x^{151} + K)$ is divisible by $(x + 1)$ then the value of K is :

(1) 1

(2) -3

(3) 2

(4) -2

27. If the graph of the equation $4x + 3y = 12$ cuts the coordinate axes at A and B, then the hypotenuse of right triangle $\triangle AOB$ is of length:

(1) 4 units

(2) 3 units

(3) 5 units

(4) None of these

28. Two points having the same abscissae but different ordinates lie on:

(1) x-axis

(2) y-axis

(3) a line parallel to the y-axis

(4) a line parallel to the x-axis

29. Two complementary angles are such that two times the measure of one is equal to three times the measure of the other. The measure of the smaller angle is :

(1) 45°

(2) 30°

(3) 36°

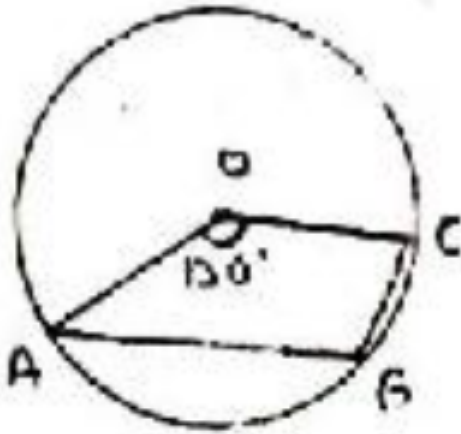
(4) None of these

30. If one angle of a parallelogram is 24° less than twice the smallest angle, then the measure of the largest angle of the parallelogram is :

(1) 176°

- (2) 68°
 - (3) 112°
 - (4) 102°
-

31. In figure, O is the centre of the circle such that $\angle AOC = 130^\circ$, then $\angle ABC = \dots\dots$



- (1) 130°
 - (2) 115°
 - (3) 65°
 - (4) 165°
-

32. The sum of the length, breadth and depth of a cuboid is 19 cm and its diagonal is $5\sqrt{5}$ cm. Its surface area is :

- (1) 361 cm^2
 - (2) 125 cm^2
 - (3) 236 cm^2
 - (4) 486 cm^2
-

33. Vertical cross-section of a right circular cylinder is always a :

- (1) Square
 - (2) Rectangle
 - (3) Rhombus
 - (4) Trapezium
-

34. The ratio between the volume of a sphere and volume of a circumscribing right circular cylinder is :

- (1) 2 : 1
 - (2) 1 : 1
 - (3) 2 : 3
 - (4) 1 : 2
-

35. If the ratio of mode and median of a certain data is 6 : 5, then find the ratio of its mean and median :

- (1) 3 : 5
 - (2) 3 : 10
 - (3) 9 : 10
 - (4) 10 : 9
-

36. If $\sqrt{2^n} = 1024$ then $3^{2(\frac{n}{4}-1)} = \dots\dots\dots$

- (1) 3
 - (2) 9
 - (3) 27
 - (4) 81
-

37. If $3x = a + b + c$, then the value of

$[(x - a)^3 + (x - b)^3 + (x - c)^3 - 3(x - a)(x - b)(x - c)]$ is :

- (1) $a + b + c$
 - (2) $(a - b)(b - c)(c - a)$
 - (3) 0
 - (4) None of these
-

38. The percentage increase in the area of a triangle if its each side is doubled will be:

- (1) 200%
- (2) 300%
- (3) 400%

(4) None of these

39. If ℓ is the length of a diagonal of a cube of volume V , then:

- (1) $3V = \ell^3$
 - (2) $\sqrt{3}V = \ell^3$
 - (3) $3\sqrt{3}V = 2\ell^3$
 - (4) $3\sqrt{3}V = \ell^3$
-

40. The algebraic sum of the deviations of a set of 'n' values from their mean is :

- (1) 0
 - (2) n-1
 - (3) n
 - (4) n+1
-

41. H.C.F. of 85 and 119 can be expressed in the form of $85x - 153$. Value of x is :

- (1) 1
 - (2) 2
 - (3) 3
 - (4) 4
-

42. If α and β are the zeros of the polynomial, such that $\alpha + \beta = 6$ and $\alpha\beta = 4$, then the quadratic polynomial is:

- (1) $x^2 - x - 6$
 - (2) $x^2 + x - 6$
 - (3) $x^2 - 6x + 4$
 - (4) $x^2 - 6x + 4$
-

43. The value of k for which the equations $6x - 2y = 3$ and $kx - y = 2$ have infinitely many solutions is:

- (1) -3
- (2) 3
- (3) No value

(4) $\frac{3}{2}$

44. If $x^2 - 5x + 1 = 0$, then $\left(x + \frac{1}{x}\right)$ will be equal to :

- (1) 10
 - (2) 8
 - (3) 6
 - (4) 5
-

45. The sum of first 5 multiples of 3 is :

- (1) 45
 - (2) 55
 - (3) 65
 - (4) 75
-

46. If $2k, 3k-1, 8$ are in A.P. Then the value of k is :

- (1) $\frac{3}{2}$
 - (2) $\frac{5}{2}$
 - (3) $\frac{1}{2}$
 - (4) $\frac{7}{2}$
-

47. What is the sum of first n natural numbers ?

- (1) $\frac{n(n+3)}{2}$
 - (2) $\frac{n(n+1)}{2}$
 - (3) $\frac{n^2(n+1)}{2}$
 - (4) $\frac{n(n^2+1)}{2}$
-

48. In a right triangle, the square of the hypotenuse is equal to the of the square of the other two sides.

- (1) Product
- (2) Sum
- (3) Difference

(4) Ratio

49. A ladder is placed against a wall such that its foot is at a distance of 2.5 m from the wall and its top reaches 6 m above the ground. Then the length of the ladder is:

- (1) 3.5 m
 - (2) 4.5 m
 - (3) 8.5 m
 - (4) 6.5 m
-

50. If a line segment joining the points P and Q $(3, -4)$ is bisected at origin, then the coordinates of P are :

- (1) $(4, -3)$
 - (2) $(2, 4)$
 - (3) $(-3, 4)$
 - (4) $(4, 3)$
-

PHYSICS

51. Electric current produces :

- (1) Heating effect
 - (2) Magnetic effect
 - (3) Both 1 & 2
 - (4) None of the above
-

52. Which one is not true for magnetic field lines ?

- (1) They do not intersect each other.
 - (2) Outside the magnet, they are from North pole to South pole.
 - (3) Outside the magnet, they are from South pole to North pole.
 - (4) They form closed loop.
-

53. At the time of short circuit, the current in the circuit is :

- (1) Reduces

- (2) Remains constant
 - (3) Increases heavily
 - (4) Vary continuously
-

54. The device used for producing electric current is called:

- (1) Generator
 - (2) Galvanometer
 - (3) Ammeter
 - (4) Motor
-

55. The north and south poles of a magnet:

- (1) are of different strength
 - (2) are of equal strength
 - (3) can be separated by cutting the magnet
 - (4) None of the above
-

56. Strength of magnetic field produced by a current carrying solenoid depends upon :

- (1) Number of turns
 - (2) Current
 - (3) Nature of core
 - (4) All the above
-

57. An electromagnet is :

- (1) A permanent magnet
 - (2) A temporary magnet
 - (3) Both 1 & 2
 - (4) None of the above
-

58. A mirror forms a virtual and diminished image. It is a :

- (1) Convex mirror
- (2) Plane mirror
- (3) Concave mirror

(4) None of the above

59. Focal length of a plane mirror is :

- (1) Infinite
 - (2) Zero
 - (3) 1 m
 - (4) 5 cm
-

60. A convex lens forms the image of sun at :

- (1) Focus
 - (2) Centre of curvature
 - (3) Between focus and centre of curvature
 - (4) No image is formed
-

61. Speed of light in vacuum is:

- (1) 8×10^3 m/s
 - (2) 8×10^6 m/s
 - (3) 3×10^6 m/s
 - (4) 3×10^8 m/s
-

62. The cause of twinkling of stars is:

- (1) Dispersion
 - (2) Scattering
 - (3) Atmospheric refraction
 - (4) Reflection
-

63. Blue colour of sky is due to :

- (1) Reflection
 - (2) Scattering
 - (3) Dispersion
 - (4) Refraction
-

64. Myopia is corrected by using :

- (1) Concave lens
 - (2) Convex lens
 - (3) Cylindrical lens
 - (4) Any lens
-

65. For which colour of light, the angle of deviation by a prism is maximum ?

- (1) Red
 - (2) Yellow
 - (3) Blue
 - (4) Violet
-

66. What does the odometer of vehicle measure?

- (1) Speed
 - (2) Distance
 - (3) Acceleration
 - (4) Velocity
-

67. An object travels 25 m in 5 s and then travels 25 m in 3 s. What is the average speed of the object?

- (1) 4.25 m/s^{-1}
 - (2) 5.25 m/s^{-1}
 - (3) 6.25 m/s^{-1}
 - (4) 5.33 m/s^{-1}
-

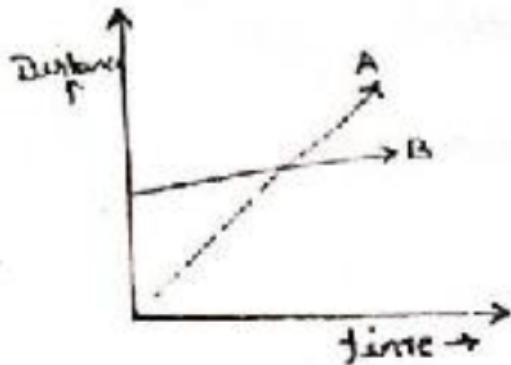
68. A train is moving at a constant speed of 54 km/h. What is the speed of the train in m/s?

- (1) 5 m/s^{-1}
- (2) 15 m/s^{-1}
- (3) 25 m/s^{-1}
- (4) 35 m/s^{-1}

69. What is the 'SI' unit of acceleration ?

- (1) KMSec^{-1}
 - (2) KM/Sec^{-1}
 - (3) MS^{-1}
 - (4) MS^{-2}
-

70. In this graph which line (A or B) show high velocity :



- (1) A line
 - (2) B-line
 - (3) Both are same
 - (4) None of these
-

71. An object mass is 'M' and Velocity is 'V'. What is the momentum of the object :

- (1) $2 MV$
 - (2) MV
 - (3) MV^2
 - (4) $\frac{1}{2}MV^2$
-

72. When we beat a carpet by stick the dust particles come out. Which law of motion works here ?

- (1) First law of Motion
- (2) Second law of Motion
- (3) Third law of Motion

(4) None of these

73. An object has a mass of 120 kg on Earth. What is the mass of the object on the Moon?

- (1) 60 kg
 - (2) 120 kg
 - (3) 20 kg
 - (4) 10 kg
-

74. If we apply 10 N of force on an object, then the acceleration produced is 2.5 m/s^2 . What is the mass of the object?

- (1) 4 kg
 - (2) 8 kg
 - (3) 12 kg
 - (4) 16 kg
-

75. If we walk on Ice its not easy for us why?

- (1) Low friction
 - (2) High friction
 - (3) Zero friction
 - (4) None of these
-

76. A naughty boy hit a mango tree by stone then a mango fall down. Why the mango fall down :

- (1) Due to gravitational force of earth
 - (2) Due to friction
 - (3) Due to acceleration
 - (4) None of these
-

77. Universal Law of gravitation is :

- (1) $F = G \frac{Mm}{d^2}$
- (2) $F = G \frac{m_1 m_2}{d^2}$

- (3) $F = mg$
(4) 1 and 2 both
-

78. 1 KWh is equal to :

- (1) $3.6 \times 10^6 \text{ J}$
(2) $3.6 \times 10^9 \text{ J}$
(3) $3.6 \times 10^{12} \text{ J}$
(4) $3.6 \times 10^7 \text{ J}$
-

79. Sound can move in:

- (1) Solid
(2) Liquid
(3) Vacuum
(4) 1 and 2 both
-

80. What is the relation between sound velocity (V), frequency (γ), and wavelength (λ)?

- (1) $V = \gamma\lambda$
(2) $\gamma = \frac{V}{\lambda}$
(3) $\lambda = \frac{V}{\gamma}$
(4) All of these
-

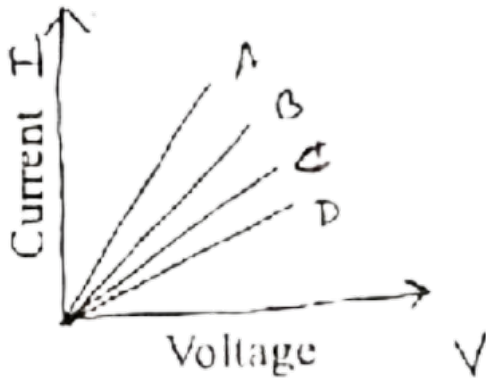
81. The number of electrons constituting one coulomb of charge :

- (1) 6.25×10^{18}
(2) 1.6×10^{-19}
(3) 7.25×10^{23}
(4) 6.23×10^{-23}
-

82. The resistance of an ideal Voltmeter is :

- (1) 100Ω
(2) Infinite
(3) Low
(4) Zero

83. V-I graph for four materials A, B, C & D are shown in fig. The best material to make live wire of domestic wiring is :



- (1) A
- (2) B
- (3) C
- (4) D

84. The resistivity of a conductor depends upon :

- (1) Area of cross-section of conductor
- (2) Length of conductor
- (3) 1 and 2 both
- (4) None of the above

85. If the diameter of a wire of $1\ \Omega$ is tripled, then its resistance will become:

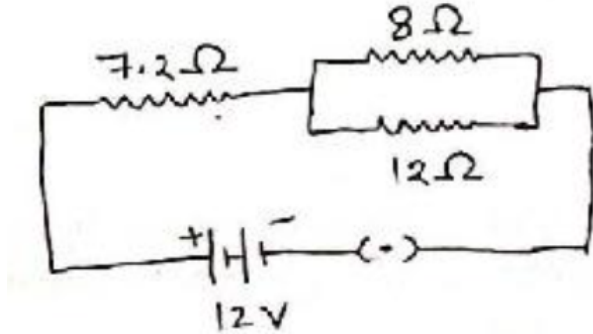
- (1) $9\ \Omega$
- (2) $\frac{1}{9}\ \Omega$
- (3) $\frac{1}{3}\ \Omega$
- (4) $3\ \Omega$

86. On increasing the temperature, the resistance of conductors:

- (1) Increases
- (2) Decreases
- (3) Becomes zero

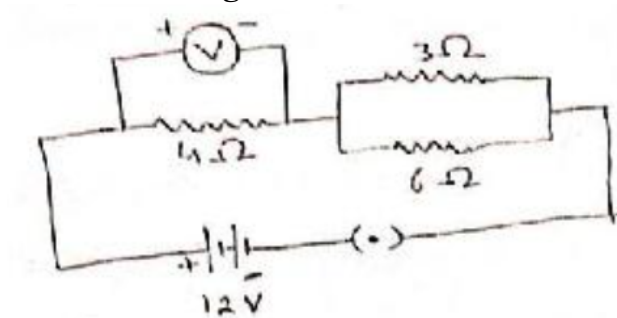
(4) None of the above

87. The current in 7.2Ω resistor is :



- (1) 1.5 A
 - (2) 2 A
 - (3) 1 A
 - (4) 0.5 A
-

88. The reading of the voltmeter is :



- (1) 4 V
 - (2) 3 V
 - (3) 8 V
 - (4) 6 V
-

89. Which of the following does not represent electric power in the circuit ?

- (1) I^2R
 - (2) IR^2
 - (3) VI
 - (4) $\frac{V^2}{R}$
-

90. Two identical resistance wires are first connected in series and then in parallel in an electric circuit. The ratio of heat produced in the two cases will be :

- (1) 1:2
 - (2) 2:1
 - (3) 1:4
 - (4) 4:1
-

CHEMISTRY

91. Rancidity is due to oxidation of:

- (1) Oil
 - (2) Fats
 - (3) Oil and Fats
 - (4) None of these
-

92. The reaction $\text{CuSO}_4 + \text{Zn} \rightarrow \text{ZnSO}_4 + \text{Cu}$ is an example of a:

- (1) Combination reaction
 - (2) Double displacement reaction
 - (3) Decomposition reaction
 - (4) Displacement reaction
-

93. FeSO_4 decomposes on heating into :

- (1) ' Fe_2O_3 '
 - (2) ' Fe_2O_3 ' & ' SO_2 '
 - (3) ' Fe_2O_3 ' & ' SO_3 '
 - (4) ' Fe_2O_3 ', ' SO_2 ' and ' SO_3 '
-

94. Propane, with the molecular formula C_3H_8 has :

- (1) '6' Covalent bonds
- (2) '7' Covalent bonds
- (3) '10' Covalent bonds
- (4) '8' Covalent bonds

95. Two successive compounds, having same functional group. They have a difference of :

- (1) -CH_2 Unit
 - (2) -CH_3 Unit
 - (3) $\text{-C}_2\text{H}_2$ Unit
 - (4) -CH_4 Unit
-

96. Formula of Carboxylic group is :

- (1) -CHO
 - (2) -COOH
 - (3) -COCH_3
 - (4) -OH
-

97. Triads rule was given by:

- (1) Rutherford
 - (2) Dobereiner
 - (3) New Lands
 - (4) Rutherford and New Land
-

98. Which element has '2, 8, 1' Electronic configuration?

- (1) K
 - (2) Mg
 - (3) Al
 - (4) Na
-

99. Mendeleev's Modern periodic law is based on :

- (1) Atomic mass
 - (2) Atomic Number
 - (3) No. of Neutron's
 - (4) Atomic mass and atomic Number
-

100. SI unit of density is :

- (1) Kg/cm³
 - (2) Kg/m³
 - (3) g/m³
 - (4) g/cm³
-

101. "Tyndall effect" will be shown by which of the following ?

- (1) Distilled water
 - (2) Sugar solution
 - (3) Ethanol
 - (4) Starch solution
-

102. The formula of Calcium Carbonate is :

- (1) MgCO₃
 - (2) Na₂CO₃
 - (3) CuCO₃
 - (4) CaCO₃
-

103. Choose the correct relationship: molar mass - common name - chemical formula from the following options.

- (1) 22.5-Ethyne-C₂H₂
 - (2) 292.5-Sulphur molecule-S₈
 - (3) 36.5-Hydrochloric acid-HCl
 - (4) 65.5-Nitric acid-HNO₃
-

104. What is the mass of 0.5 mole of oxygen atoms?

- (1) 10 g
 - (2) 12 g
 - (3) 14 g
 - (4) 8 g
-

105. The Avogadro constant $6.022140857 \times 10^{23}$ is defined as the number of atoms

present in exactly 12 g of

- (1) Carbon-12
 - (2) Oxygen-16
 - (3) Nitrogen-14
 - (4) Carbon-14
-

106. The Law of Conservation of Mass-During a chemical reaction

- (1) the sum of the masses of all reactants is not equal to sum of masses of all products.
 - (2) the sum of masses of all reactants is equal to the sum of masses of all products.
 - (3) the sum of the masses of all reactants is equal to half of sum of masses of all products.
 - (4) the sum of masses of all reactants is equal to double of sum of masses of all products.
-

107. Composition of the nuclei of two atomic species A and B are given as under :

	A	B
Protons	6	6
Neutrons	6	8

Choose the correct relationship between A and B ?

- (1) A and B are Isotopes
 - (2) A and B are Isobars
 - (3) A and B are Isotones
 - (4) A and B are Isomers
-

108. Which one of the following is a correct electronic configuration of Ne atom ?

- (1) 2,8
- (2) 2,7
- (3) 2,6
- (4) 2,5

109. Which one of the following pairs is showing a correct isotopes of Cl atom?

- (1) Chlorine. ^{34}Cl and ^{37}Cl
 - (2) Chlorine. ^{35}Cl and ^{36}Cl
 - (3) Chlorine. ^{35}Cl and ^{37}Cl
 - (4) Chlorine. ^{35}Cl and ^{35}Cl
-

110. The atomic number of an element is the same as the number of :

- (1) Neutrons in the nucleus of its atom.
 - (2) sum of the number of protons and Neutrons in the nucleus of its atom.
 - (3) sum of the number of protons and electrons in the nucleus of its atom.
 - (4) protons in the nucleus of its atom.
-

111. Rutherford's alpha-particle scattering experiment was responsible for the discovery of:

- (1) atomic nucleus
 - (2) electron
 - (3) number of proton
 - (4) number of neutron
-

112. In which conditions rusting of iron takes place in presence of:

- (1) 'air'
 - (2) H_2O
 - (3) 'air' and ' H_2O '
 - (4) Only ' N_2 '
-

113. Which metals are kept in kerosene?

- (1) Na & K
 - (2) Zn
 - (3) Cu
 - (4) Fe
-

114. Conductivity of metal's is due to :

- (1) Free Electrons
 - (2) Ions
 - (3) atoms
 - (4) Nutrons
-

115. What is the formula of plaster of Paris?

- (1) CaSO_4
 - (2) $\text{CaSO}_4 \cdot \frac{1}{2}\text{H}_2\text{O}$
 - (3) $\text{CaSO}_4 \cdot \text{H}_2\text{O}$
 - (4) CaSO_3
-

116. Bleaching Powder is mixed in drinking water. Why?

- (1) To kill the germs
 - (2) As an oxidizing agent
 - (3) '1' & '2'
 - (4) None of these
-

117. Which acid is produced in our stomach ?

- (1) HBr
 - (2) HCl
 - (3) H_2SO_4
 - (4) HNO_3
-

118. A Solution turns blue Litmus red, its pH is likely to be :

- (1) 11
 - (2) 14
 - (3) 5
 - (4) 10
-

119. A Solution reacts with egg-shell to give CO_2 gas, the Solution contains :

- (1) Mg Cl_2

- (2) Na Cl
 - (3) KCl
 - (4) HCl
-

120. What happens; When dilute 'HCl' is added to granulated 'Zn' ?

- (1) 'H₂' gas and 'ZnCl₂' are Produced
 - (2) No Reaction Produced
 - (3) 'H₂O' and 'ZnO' are Produced
 - (4) H₂O and ZnSO₄ are Produced
-

121. Among the following, what is used to check the rate of transpiration?

- (1) Barometer
 - (2) Potometer
 - (3) Hygrometer
 - (4) Galvanometer
-

122. New plants grown up by using the tip of a plant is known as:

- (1) Regeneration
 - (2) Tissue culture
 - (3) Grafting
 - (4) Layering
-

123. Respiration is a :

- (1) Biochemical reaction
 - (2) Electro Chemical reaction
 - (3) Physical action
 - (4) None of these
-

124. The enzyme 'pepsin' is inactive in stomach without the presence of :

- (1) Nitric Acid
- (2) Hydrochloric Acid
- (3) Acetic Acid

(4) Butyric Acid

125. Contraction of the protoplast of a plant cell as a result of loss of water from the cell is :

- (1) Endocytosis
 - (2) Plasmolysis
 - (3) Exocytosis
 - (4) Lysis
-

126. Two cell organelles who has its own genetic material:

- (1) Mitochondria and vacuoles
 - (2) Plastids and vacuoles
 - (3) Mitochondria and Plastids
 - (4) Endoplasmic Reticulum and Mitochondria
-

127. Plasma contains:

- (1) Red Blood Cells, White Blood Cells, and Platelets.
 - (2) Red Blood Cells, Fats, Hormones, and Platelets.
 - (3) White Blood Cells, Fats, Hormones, and Platelets.
 - (4) Red Blood Cells, Plastids, and Platelets.
-

128. Name the type of epithelial tissue which forms the lining of kidney tubules and ducts of salivary glands:

- (1) Cuboidal epithelium
 - (2) Stratified squamous epithelium
 - (3) Ciliated Columnar epithelium
 - (4) Glandular epithelium
-

129. Antedon (Feather Star) is an example of :

- (1) Protochordata
- (2) Echinodermata
- (3) Mollusca

(4) Arthropoda

130. Sleeping sickness is caused by:

- (1) Protozoan Trypanosoma
 - (2) SARS Bacteria
 - (3) Staphylococcus Bacteria
 - (4) Protozoan Leishmania
-

131. The enzyme that breaks down protein during digestion :

- (1) Trypsin
 - (2) Amylase
 - (3) Pepsin
 - (4) Chymotrypsin
-

132. A plant hormone that cause wilting of leaves is :

- (1) Auxin
 - (2) Gibberellin
 - (3) Cytokinin
 - (4) Absciscic Acid
-

133. The process of purifying blood by an artificial kidney is known as:

- (1) Dialysis
 - (2) Haemodialysis
 - (3) Filtration
 - (4) None of these
-

134. What is the energy currency of the cell?

- (1) Fat
 - (2) Protein
 - (3) ADP
 - (4) ATP
-

135. The change of radiant energy into chemical energy is known as :

- (1) Photosynthesis
 - (2) Chemical Synthesis
 - (3) Respiration
 - (4) Transpiration
-

ENGLISH

136. Choose an antonym (opposite in meaning) for 'short':

- (1) small
 - (2) less
 - (3) long
 - (4) tall
-

137. Choose the correct form of verb :

Her hair crisp and black.

- (1) are
 - (2) were
 - (3) is
 - (4) am
-

138. Choose the correct word to fill the blank :

..... is good for health.

- (1) Walking
 - (2) Writing
 - (3) Waiting
 - (4) Reading
-

139. Choose the correct option:

Mohan this book yesterday.

- (1) buy
- (2) bought

- (3) will buy
 - (4) buying
-

140. Find the one word that can substitute the following:

”The act of afforestation by planting many trees.”

- (1) Deforestation
 - (2) Afforestation
 - (3) Forest
 - (4) Defrost
-

141. Find the correct option for the following jumbled words :

indoor/and/there/are/outdoor/kind of/various/games

- (1) There are various kind of indoor and outdoor games.
 - (2) There are indoor and outdoor kind of various games.
 - (3) Various kind of indoor and outdoor games are there.
 - (4) Indoor and outdoor kind of various games are there.
-

142. Fill the correct choice : The of flowers.

- (1) group
 - (2) collection
 - (3) bunch
 - (4) heap
-

143. Find the correct verb for the word 'advice' :

- (1) advise
 - (2) advisor
 - (3) advisable
 - (4) advisory
-

144. Find the correct option for the underline idiom :

He got fame by leaps and bounds.

- (1) slowly

- (2) silently
 - (3) surprisingly
 - (4) rapidly
-

145. Fill in the blank with the correct preposition:

He died ----- hunger.

- (1) of
 - (2) from
 - (3) by
 - (4) with
-

146. Which is the correct passive form of the following sentence:

Pradeep writes a letter.

- (1) A letter was written by Pradeep.
 - (2) A letter has been written by Pradeep.
 - (3) A letter is written by Pradeep.
 - (4) A letter will be written by Pradeep.
-

147. Fill in the blank with a suitable article :

His wife is actress.

- (1) an
 - (2) a
 - (3) the
 - (4) am
-

148. Choose correct form of verb :

Ansha to be a space scientist.

- (1) want
 - (2) wants
 - (3) wanting
 - (4) become
-

149. Fill in the blank with a suitable modal :

Soldiers obey the orders of their officers.

- (1) need
 - (2) might
 - (3) could
 - (4) must
-

150. Choose the word similar in meaning to the word 'kind' :

- (1) rude
 - (2) merciful
 - (3) eager
 - (4) cruel
-