B.Sc.(Hons) 2019-20

1. The antonym of 'dubious'
   (a) Unpleasant (b) Gracious (c) Dexterous (d) Definite
2. The singular of 'phenomena' is
   (a) Phenomenis (b) Phenomenanon
   (c) Phenamena (d) Phenomenon
3. Choose the correct option for the underlined part
   A pair of shoes *have been* purchased by me.
   (a) has been (b) has being (c) would been (d) none
4. Choose the correct alternative out of the four given.
   The thieves ---------- in a stolen jeep
   (a) made out (b) made up (c) made off (d) made over
5. Bread and butter ---------- there on the table
   (a) was (b) were (c) are (d) have
6. There were ---------- books in his bag
   (a) little (b) a little (c) the little (d) few
7. He is the friend ---------- I trust the most
   (a) whose (b) which (c) whom (d) who
8. Choose the correct senence
   (a) My son is desirous on joining the army
   (b) My son is desirous in joining the army
   (c) My son is desirous for joining the army
   (d) My son is desirous of joingin the army
9. The passive voice of 'Do not insult the weak'.
   (a) The weak is not insulted
   (b) The weak is not to be insulted
   (c) Let the weak not insulted (d) Let the weak not be insulted
10. We must adopt ourselves ----- our circumstances
    (a) with (b) in (c) to (d) by
11. He said that he did not remember ---- a more enjoyable movie
    (a) seen (b) saw (c) having seen (d) seeing
12. The indirect speech of
    He said, "I met this man two days ago"
    (a) He said that I had met this man two days ago
    (b) He said that I met that man two days before
    (c) He said that he had met this man two days ago
    (d) He said that he had met that man two days before

13. He fled ---------- he should be killed
(a) lest (b) otherwise (c) while (d) because

14. ---------- he is mad, ---------- he feigns madness
(a) neither, or (b) eiher, or
(c) neither, either (d) either, neither

15. The passive voice of
'The candidates are submitting the answer sheets to the invigilators'
(a) The invigilators are being submitted the answer sheets by the candidates
(b) The answer sheets to the invigilators are submitted by the candidates
(c) The answer sheets are being submitted to the invigilators by the candidates
(d) The answer sheets are to be submitted to the invigilators

16. Congratulations on passing your exam. You ---------- be very pleased
(a) should (b) must (c) can (d) shall

17. He cut his finger ---------- a knife
(a) with (b) by (c) from (d) into

18. The antonym of 'erudite' is
(a) ignorant (b) crude (c) boring (d) sophisticated

19. Fear of beig enclosed in a small closed space is
(a) agoraphobia (b) claustrophobia
(c) xenophobia (d) paranoia

20. Talking in one's sleep is
(a) somniloquence (b) secant (c) Sophistry (d) sequacious

21. I will find you ---------- you are
(a) wherefore (b) therefore (c) where (d) wherever

22. It is very difficult to overcome the ---------- of habits such as smoking and taking drugs
(a) stupidity (b) tenacity (c) insecurity (d) ravages

23. The clothes Nafees, the famous designer, designs for men are conservative, but her fashions for women are more
(a) flamboyant (b) subtle (c) tasteful (d) expensive

24. The antonym of 'misanthrope' is
(a) Philanthrope (b) Anthrope
(c) Anthropephile (d) Anthroplogist

25. The synonym of 'vociferous' is
(a) loud (b) calm (c) honest (d) bold

26. The most stable dihalides in the carbon family is
(a) CX_2 (b) SnX_2 (c) SiX_2 (d) PbX_2

27. Which of the following complexes is optically active?
(a) Trans- $[Co(NH_3)_4Cl_2]$ (b) Trans-$[Co(NH_3)_2Cl_4]^+$
(c) Cis-$[Co(en)_2Cl_2]$ (d) Trans-$[Co(en)_2Cl_2]$

28. The type of back bonding involved in BF_3 molecule is
(a) $p\pi$-$p\pi$ (b) $d\pi$-$p\pi$ (c) $d\pi$-$d\pi$ (d) $d\pi$-π^*

29. Which of the following has a tendency to form oxo ion?
(a) Nd (b) U (c) Gd (d) Dy

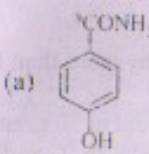
30. The number of lone pair of electrons in XeF_2, XeF_4 and, XeF_6 molecules respectively, are
(a) 2, 3, 1 (b) 1, 2, 3 (c) 3, 2, 1 (d) 1, 3, 2

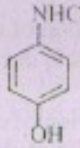
31. The number of P-P bonds in the structure of white phosphorous is
(a) 1 (b) 3 (c) 4 (d) 6

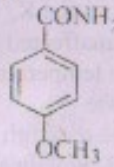
32. The structures of SF_4 and ClF_3 molecules respectively, are
(a) Tetrahedral and triangular (b) T-shaped and T- shaped
(c) See-saw and T-shaped (d) T-shaped and See-saw

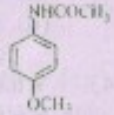
33. Which of the following does not obey 18 electron rule?
(a) $Cr(CO)_6$ (b) $Fe(CO)_5$ (c) $V(CO)_6$ (d) $Mn_2(CO)_{10}$

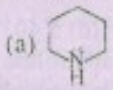
34. The correct structure of paracetamol is

(a) 

(b) 

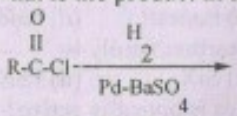
(c) 

(d) 

35. The strongest base is
(a) 
(b) 
(c) 
(d) 

36. $CH_3COOH \xrightarrow[P_2O_5]{\Delta} X$, Identify X
(a) CH_3COCH_3 (b) CH_3CHO
(c) $(CH_3CO)_2O$ (d) CH_4

37. What is the product in the following reaction



(a) RCH_2OH (b) RCOOH (c) RCHO (d) RCH_3

38. $LiAlH_4$ converts acetic acid into
(a) Acetaldehyde (b) Ethyl alcohol (c) Ethane (d) Methane

39. Iodoform can be used as
(a) Anaesthetic (b) Antiseptic (c) analgesic (d) antifebrin

40. Carprolactam is a monomer for the synthesis of
(a) Nylon 6 (b) Nylon 6, 6 (c) Dacron (d) Teflon

41. The double helical structure of DNA is due to
(a) Van der Waals' foreces (b) Dipole-dipole interaction
(c) Hydrogen bonding (d) Electrostatic attractions

42. The equilibrium constant K_c for the reaction of hydrogen with iodine is 57.0 at 700 K and the reaction is endothermic

$(\Delta E=9KJ) H_2(g)+I_2(g) \underset{K_r}{\overset{K_f}{\rightleftharpoons}} 2HI(g)$ $K_c=57.0$ at 700 k.

Which of the following statement is true
(a) $K_f = K_r$ at 700 K
(b) Catalyst will increase the rate constant K_f and decrease the rate constant K_r
(c) K_c is unaffected by the addition of catalyst
(d) As the temperature increases k_f decrease by more than K_r decrease

43. What is the molalith of the solution of citric acid in 50 gram of acetic acid showng a boiling point elevation of 1.76 ^{0}C and having $K_b=3.07^0$C kg/mol
(a) 1.76 m (b) 3.07 m (c) 0.573 m (d) 5.403 m

44. Let x_1 and x_2 be the mole fractions of solvent and solute respectively; and P_1 be the vapour pressure of solvent above the solution. Also, P_1^0 is the vapour pressure of the pure solvent. Then for an ideal solution, following relation is false

(a) $P_1 = p_1^0 x_1$ (b) $\frac{p_1^0 - p_1}{p_1^0} = x_2$ (c) $\Delta_{mix}H=0$ (d) $\Delta_{mix}V\neq 0$

45. Following statement is **not true** for zeolites
(a) Their structure is a 3-dimensional A1-O-Si framework
(b) They are microporous aluminosilicates
(c) They are used as catalysts in petrochemical industries
(d) Their catalytic activity is independednt of the size and shape f rreactant and product molecules

46. One mole of $PCl_3(g)$, 2 mol $Cl_2(g)$, 3 mol $PCl_5(g)$ are mixed in a one litre vessel to attain chemical equilibrium, If x moles of PCl_5 are found at the equilibrium, the equilibrium constant K_c of the reaction
$PCl_3(g)+Cl_2(g) \rightleftharpoons PCl_5(g)$ can be written as

(a) $K_c=\frac{x}{(1-x)(2-x)}$ (b) $K_c=\frac{x}{(1-x)(2+x)}$

(c) $K_c=\frac{x}{(4-x)(5-x)}$ (d) $K_c=\frac{x+3}{(1-x)(2-x)}$

47. An element M (atomic mass =75) combines with element X (atomic mass= 25) to form a compound that contains 75%M (w/w). The formula of the compound is
(a) MX (b) MX_3 (c) M_2X (d) M_3X

48. A first order reaction is 90% complete after 40 min. what will be the half-life of reaction
(a) 12.03 min (b) 11.03 min (c) 10.03 min (d) 9.03 min

49. What is the unit of $\left(\frac{\partial U}{\partial S}\right)_V$?
(a) Joul/mole (b) Joule/mole. K (c) K (d) Joule

50. Reaction between equal moles of 'A' and 'B' is of first order in 'A' and is of first order in 'B' Then, the following is wrong
(a) $-d[A]/dt=k[A]$ (b) Half-life of 'A'=Half-life of 'B'
(c) The overall reaction is of second order
(d) The rate of reaction will depend on temperature

51. A wave $y(x,t)=0.03 \sin \pi(2t-0.01)x$ travels in a medium. Here x is in metre. The instantaneous phase difference between the two points separated by 25 cm is
(a) $\pi/800$ (b) $\pi/400$ (c) $\pi/200$ (d) $\pi/100$

52. The height at which a body leaves the vertical circle is
(a) 2/3 r (b) 3/2 r (c) 3 r (d) r

53. A thin converging lens of power 12.5D is held 10 cm above a page of print. Observer's eye is 75 cm above page & his near point is 25 cm from his eye. hich of the following is incorrect
(a) The print is clearly seen (b) The print is seen inverted
(c) The print is magnigied four times
(d) The print is not clerarly seen

54. A long wire carries d.c. current. It is bent into a circle of one turn and magnetic field at the centre of the coil is B. It is then bent into a circular loop of n turns. Then the magnetic field at the centre of the coil will be given by
(a) nB (b) n^2B (c)2nB (d) $2n^2B$

55. Which of the following order is correct for the relative strength of fundamental forces
(a) Strong nuclear force> weak nuclear force> electromagnetic force> gravitational force
(b) Strong nuclear force> electromagnetic force> weak nuclear force> gravitational force
(c) Electromagnetic force> strong nuclear force > weak nuclear force> gravitational force
(d) Strong nuclear force> weak nuclear force > gravitational force > electromagnetic force

56. Two trains A and B approach a stationary observer from opposite sides with speed 30 ms^{-1} and 60 ms^{-1} respectively. Observer hears no beats. If the frequency of whistle of train B is 450 Hz. The frequency of whistle of train A is (speed of sound = 330 ms^{-1})
(a) 346 Hz (b) 405 Hz (c) 450 Hz (d) 500 Hz

57. The area of cross section of the two arms of a hydraulic press are 1 cm^2 and 10 cm^2, respectively (shown n figure). A force of 5 N is applied on the water in the thimer arm, What force should be applied on the water in the thinner arm so that the water may remain in equilibrium?
(a) 1N (b) 10 N (c) 5 N (d) 50 N

58. A satellite is in an orbit aournd the earth. If its kinetic energy is doubled, then
(a) it will maintain its path (b) it will fall on the earth
(c) it will rotate with a great speed
(d) it will escape out of earth's gravitational field

59. A cubical ice box of thermocole has each side equal to 30 cm and a thickness of 5 cm. 4kg of ice is put in the box. If outside temperature is 45^0C, coefficient of thermal conductivity is 0.01 J/sm/^{0}C, and latent heat of fusion of ice is 335×10^3 J/kg, then the mass of ice left after 6 hours
(a) 0.313 kg (b) 3.687 kg (c) 36.87 kg (d) 31.3 kg

60. A cylindrical metallic wire is stretched to increase its length by 20%. The percentage increase in its resistance
(a) 20% (b) 32% (c) 44% (d) 50%

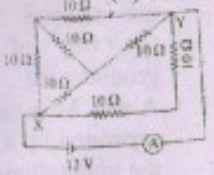
61. Water flows through a horizontal pipe. The area of cross-section at one place is 10 cm^2, velocity of water flow is 1 m/s and pressure is 2000 Pa. At another place area of cross-section is 5 cm^2, what will be the pressure at second place
(a) 125 Pa (b) 250 Pa (c) 500 Pa (d) 1000 Pa

62. The velocity of photo-electrons for the material whose work function in 1.24 eV and the wavelength of incident light is 4.36×10^{-7} m is
(a) 525.3 km/sec (b) 742.9 km/sec (c) 371.4 km/sec (d) None

63. Half life of a radioactive material is K. The fraction that would remain after K/2 is
(a) 1/2 (b) 3/4 (c) $1/\sqrt{2}$ (d) $\frac{(\sqrt{2}-1)}{\sqrt{3}}$

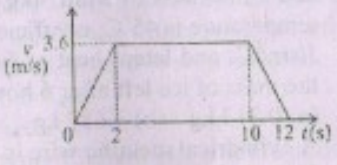
64. A telescope consists of two glass balls of refreactive index, μ=1.5 with radii R_1=6 cm and R_2=2 cm. In normal adjustment, the distance between the centres of the balls will be
(a) 6 cm (b) 8 cm (c) 10 cm (d) 12 cm (d) 12 cm

65. In the circuit shown in figure the reading of ammeter will be
(a) 1.8 A (b) 2.57A
(c) 5.47 A (d) 8.74 A



66. A serried LC circuit has inductive reactance X_l= 50 Ω capacitive reactance Xc=10 Ω capacitive reactance X_c 10 Ω and emf of source V=20 sin (100π t)V. Find the variation of current with time t in the circuit
(a) ¼ sin [100 π(t- π/2)] (b) ½ sin[100 π (t- π/2)]
(c) ¼ sin [100 π (t+ π/2)] (d) ½ sin [100 π (t+ π/2)]

67. A lift is going up. The variation in the speed of the lift is as given in the graph



The height to which the lift takes the passengers is
(a) 18 m (b) 36 m (c) 20 m (d) 24 m

68. In a circuit, a coil of inductanct 'L' a capacitor of capacitance 'C' and a resistor of resistance 'R' are connected in a series. If the potential difference across 'L' is 80 volt, across 'C' is 35 volt, and across 'R' is 50 volt, then the supply voltage will be
(a) 95 volt (b) 165 volt (c) 67 volt (d) 77 volt

69. Two discs are rotating with angular speed 2 ω and ω having moments of inrtia I and 2 I about their respective axes. They are now brought into contact face to face with their axes of rotation coincident. The loss in kinetic energy is
(a) $1/2\, I\omega^2$ (b) $1/3\, I\omega^2$ (c) $1/4\, I\omega^2$ (d) $1/5\, I\omega^2$

70. If an electron is in n=6 level then the de-Broglie wavelength associated with the electron will be
(a) Six times the de-Broglie wavelength of electron in the ground state
(b) Four times the de-Broglie wavelength of electron in the gournd state
(c) Two times the de-Broglie wavelength of electron in the ground state
(d) $(1/6)^{th}$ of the de-Broglie wavelength of electron in the ground state

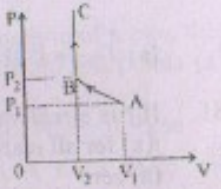
71. A mss M is split into two parts *m* and (M-m), which are then separated by a certain distance. Which ratio (m/M) maximizes the gravitational force?
(a) m/M=2/1 (b) m/M=1/3
(c) m/M=1/2 (d) m/M=1

72. When atmospheric temperature falls below 0, -0-C the water in the lake starts freezing. Then time taken by ice to grow a thickness y at atmospheric temperature $-\theta\,^{\circ}C$ is

(a) $-\frac{KA\theta}{y}t$ (b) $\frac{\rho L}{K\theta}y^2$ (c) $\frac{\rho L}{K\theta}y$ (d) $\frac{1}{2}\frac{\rho L}{K\theta}y^2$

(K= thermal conductivity of water, p-density, A=area of lake, L= latent heat)

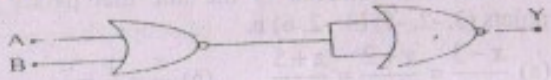
73. Two moles of an ideal monatomic gas initially at pressure P_1 and volume V_1, undergo an adiabatic compression until its volume if V_2. The gas is given heat Q at constant volume V_2. The total work done by the gas is



(a) $-2P_1V\left[1-\left(\frac{V_1}{V_2}\right)^{2/3}\right]$ (b) $-\frac{3}{2}P_1V_1\left[1-\left(\frac{V_1}{V_2}\right)^{2/3}\right]$

(c) $P_1(V_2-V_1)$ (d) 0

74. The output 'Y' of the logic circuit shown in figure will be



(a) Y=A+B (b) Y=A+B (c) Y=A+B (d) Y=A-B

75. A particle of mass *m* moves in a one dimensional potential energy $U(x)= ax^2+bx^4$, where *a* and b are positive constants. The angular frequency of small oscillations about the minima of the potential energy is equal to

(a) $\pi\sqrt{\frac{a}{2b}}$ (b) $2\sqrt{\frac{a}{m}}$ (c) $\sqrt{\frac{2a}{m}}$ (d) $\sqrt{\frac{a}{2m}}$

76. If And B are two matrices of same order then (AB^T-BA^T) is a
(a) Skew symmetric matrix (b) Nul matrix
(c) Symmetric matrix (d) Unit matrix

77. If $\log_3 a \log_a x=2$, then x is equal to
(a) 9 (b) 8 (c) 27 (d) a^2

78. The total no. of terms in the expansion $(x+a)^{51}-(x-a)^{51}$
(a) 102 (b) 26 (c) 25 (d) None of these

79. If α, β are roots of $ax^2+bx+c=0$ and α+h,β+h are roots of $px^2+qx+r=0$, then the value of h is

(a) $\frac{b}{a}-\frac{q}{p}$ (b) $\frac{1}{2}\left(\frac{b}{a}-\frac{q}{p}\right)$ (c) $-\frac{1}{2}\left(\frac{b}{a}-\frac{q}{p}\right)$ (d) $\frac{1}{3}\left(\frac{b}{a}-\frac{q}{p}\right)$

80. A unit vector perpendicular to both $\hat{i}+\hat{j}$ and $\hat{j}+\hat{k}$ is

(a) $\hat{i}-\hat{j}+\hat{k}$ (b) $\hat{i}+\hat{j}+\hat{k}$ (c) $\frac{\hat{i}-\hat{j}+\hat{k}}{\sqrt{2}}$ (d) $\frac{\hat{i}-\hat{j}+\hat{k}}{\sqrt{3}}$

81. If f is a real valued function such that $f(x+2)=f(x)$ and $f(-x)=-f(x)$ for all reals x then $f(4)$ is equal to
(a) zero (b) 6 (c) -4 (d) not possible of find

82. Given the L.P.P. Minimze $Z=-3x_1+4x_2$
Subject to the constraints: $x_1+2x_2\leq 8$ $3x_1+2x_2\leq 12$
$x_1\geq 0, x_2\geq 0$
The solution is
(a) 0 (b) -12 (c) -6 (d) -16

83. The cartesian equation of the line that passes through the points (3, -2, -5) (3, -2, 6) is
(a) $\frac{x-3}{0}=\frac{y+2}{0}=\frac{z+5}{11}$ (b) $\frac{x}{3}=\frac{y}{2}=\frac{z}{5}$
(c) $\frac{x}{3}=\frac{y}{-2}=\frac{z}{-5}$ (d) $\frac{x+3}{0}=\frac{y-2}{0}=\frac{z-5}{11}$

84. If the product of n positive numbers in 1, then their sum is
(a) $\leq n$ (b) $\geq n$ (c) $=n$ (d) $\geq n^2$

85. X can hit a target 4 times in 5 shots, Y can hit 3 times in 4 shots and Z can hit 2 times in 3 shots. The probability that Y and Z hit and X does not hit is
(a) 1/5 (b) 2/5 (c) 7/12 (d) 1/10

86. If $[x]^2-5[x]+6=0$, where[.] denote the greates integral function then
(a) $x\in[3,4]$ (b) $x\in[2,3]$ (c) $x\in[2,4]$ (d) $x\in[2,3]$

87. $I=\int_{-\pi/2}^{\pi/2}\{\sin|x|+\cos|x|\}dx$ is equal to
(a) 0 (b) 4 (c) 1 (d) -1

88. The differential equation of the family of curves $x^2+y^2-2ay=0$ where a is arbitrary constant is

(a) $(x^2-y^2)\frac{dy}{dx}=2xy$ (b) $2(x^2-y^2)\frac{dy}{dx}=xy$
(c) $2(x^2+y^2)\frac{dy}{dx}=xy$ (d) $(x^2+y^2)\frac{dy}{dx}=2xy$

89. If $x\cos\alpha+y\sin\alpha=-\sin\alpha\tan\alpha$ be the equation of a line, then the length of perpendiculars on the line from the points $(a^2, 2a)$, $(ab, a+b)$, and $(b^2, 2b)$ are in
(a) A.P. (b) G.P. (c) H.P. (d) None of these

90. The value of α in order that $f(x)=\sqrt{2}(\sin x-\cos x)-2\alpha x+b$ decreases for all real values of x, is given by
(a) $a<1$ (b) $a\geq 1$ (c) $a\geq\sqrt{2}$ (d) $a<\sqrt{2}$

91. The points on the curve $9y^2=x^3$, where the normal to the curve makes equal intercepts with the axes are
(a) $(4, \pm 8/3)$ (b) $(4, -8/3)$ (c) $(4, \pm 3/8)$ (d) $(\pm 4, 3/8)$

92. $\int\frac{x\tan^{-1}x}{(1+x^2)^{3/2}}dx$ equals to

(a) $\frac{x+\tan^{-1}x}{\sqrt{1+x^2}}$ (b) $\frac{x-\tan^{-1}x}{\sqrt{1+x^2}}$
(c) $\frac{x-\tan^{-1}x}{1+x^2}$ (d) $\frac{x+\tan^{-1}x}{1+x^2}$

93. For specifying a straight line, how many geometrical parameters should be known?
(a) 1 (b) 2 (c) 3 (d) 4

94. A can solve 90% of the problems given in a book and B can solve 70%. What is the probability that at least one of them will solve problem, selected at random from book?
(a) 0.63 (b) 0.27 (c) 0.30 (d) 0.97

95. If e_1 and e_2 are ecenticities of two huperbolas
$\frac{x^2}{a^2}-\frac{y^2}{b^2}=1$ and $\frac{x^2}{b^2}-\frac{y^2}{a^2}=1$, then
(a) $\frac{1}{e_1^2}+\frac{1}{e_2^2}=1$ (b) $e_1=e_2$ (c) $e_1=-e_2$ (d) $e_1.e_2=1$

96. Let X be a binomially distributed random variable with parameter p, based on n repetition f an experiment. The standard deviation of X is
(a) np(b) $\sqrt{np}$ (c) np(1-p) (d) $\sqrt{np(1-p)}$

97. The general solution of trigonometric equation sin 3a=4sin α. sin (x+α), sin (x=α) (where $\alpha \neq n\pi, n \varepsilon Z$) is
(a) $2n\pi \pm \frac{\pi}{3}$ (b) $2\pi + \frac{\pi}{6}$ (c) $n\pi \pm \frac{\pi}{6}$ (d) $n\pi \pm \frac{\pi}{3}$

98. $\sin^{-1}(1-x) - 2\sin^{1}x = \frac{\pi}{2}$, then x is equal to
(a) 0, ½ (b) 1, 1/2 (c) 0 (d) 1/2

99. In an ellipse the distance between its foci is 6 and its minor axis is 8.. Then its eccentricity is
(a) $\frac{4}{5}$ (b) $\frac{1}{\sqrt{52}}$ (c) $\frac{3}{5}$ (d) $\frac{1}{2}$

100. If $Zr = \cos\frac{2\pi r}{5} + I \sin\frac{2\pi r}{5}$; r=0,1,2,3,4 then $z_0 z_1 z_2 z_3 z_4$ is equal
(a) 1 (b) -1 (c) 2 (d) -2

101. Glomerular filtration rate (GFR) in a healthy individual is approximately
(a) 180 ml/minute (b) 125 ml/minute
(c) 80 m;/minute (d) 280 ml/minute

102. The natural killer cells are a type of
(a) T4 cells (b) T8 cells (c) B4 cells (d) B8 cells

103. The disorder caused by the excessive secretion of growth hormone in adults causes
(a) Gigantism (b) Acromegaly
(c) Cretinism (d) Muxedema

104. Which one of the following is a type of cancer found in humans?
(a) Asthma (b) Emphysema(c) Melanoma (d) Hematoma

105. The cellulose is a polymeric polysaccharide consisting of
(a) Fructose (b) Sucrose (c) Glucose (d) Xylose

106. In gout, high level of which of the following is found in blood
(a) Urea (b) Uric acid (c) Cholesterol (d) Ammonia

107. Which one of the following is not the larval stage of liver fluke?
(a) miracidium (b) coracidium (c) redia (d) cercaria

108. Microcytic anaemia is due to deficiency of
(a) Vitamin B_{12} (b) Folic acid (c) Fe (d) Vitamin B_2

109. Inspiratory capacity (IC) of human lung is
(a) Tidal volume + residual volume
(b) Tidal volume + expiratory reserve volume
(c) Tidal volume _ inspiratory reserve volume
(d) Residual volume + expiratory reserve volume

110. The chief nitrogenous waste product, ammonia is convered into urea in the
(a) Liver (b) Kidney (c) Blood (d) Spleen

111. The correct dental formula of humans is
(a) 2132/2132(b) 2123/2123(c) 3123/3123 (d) 2312/2312

112. Shert lived immunity acquired through mother's milk by the infatnt is called
(a) Natural active immunity (b) Artificial passive immunity
(c) Artificial active immunity (d) Natural passive immunity

113. Water molecule is
(a) Positively charged (b) Dipolic
(c) Negative charged (d) Carrying no charge

114. Cytochrome oxidase, for its activity contains
(a) Mg (b) Fe (c) Co (d) Mn

115. During photosynthetic light phase, PSII absorbs energy at or just below
(a) 700 nm (b) 870 nm (c) 680 nm (d) 780 nm

116. Which element is required for nodulation in legumes?
(a) Manganese (b) Iron (c) Molybdenum (d) Boron

117. Which water fern is used as biofertilizer in rice fields?
(a) *Marsilea* (b) *Azolla* (c) *Salvinia* (d) *Ptridium*

118. Exotic species having been introduced in India are
(a) *Lantana camara,* Water hyacinth
(b) Water hyacinth, *Prosopic cineraria*
(c) *Lantana camara, Ficus religiosa*
(d) Nile perch, *ficus religiosa*

119. Green house effect is caused by
(a) Green plants (b) Infrared rays (c) UV rays (d) X-rays

120. The distance between two consecutive base pairs of DNA
(a) 0.34×10^{-9}nm (b) 0.34×10^{-9} µm
(c) 0.34×10^{-9} mm (d) 0.34×10^{-9}m

121. Several pathogens can be controlled by treating plants with
(a) *Ustilogo* (b) *Fusarium* (c) *Rhizopus* (d) *Trichoderma*

122. Which one of the following microbes does not fix atmospheric nitrogen?
(a) *Azospirillum* (b) *Azotobacter*
(c) *Anabaena* (d) *Glomus*

123. In a monohybrid cross, absence of complete dominance is indicated by the F_1 plants that are intermediate in appearance and this can be further confirmed if the phenotypic ratio in the F_2 generation is
(a) 1:2:1 (b) 2:1:1 (c) 3:1 (d) 1:1

124. Which one of the following is also called scattering of variability?
(a) Gene pool (b) Isolation (c) Genetic drift (d) Gene flow

125. How many lobes are present in right lung of man?
(a) 2 (b) 3 (c) 4 (d) 5

126. Moderately impaired hearing is when the child does not respond to sound up to
(a) 40 dB (b) 70 dB (c) 95 dB (d) 110 dB

127. The ability of not forgetting existence of the toy is called
(a) Object value (b) Object criteria
(c) Object permanence (d) Object evaluation

128. "Audiometer" an electronic audio device for hearing impaired children was developed in the year
(a) 1910 (b) 1920 (c) 1940 (d) 1930

129. Piping should be cut always on the true bias to get maximum
(a) Stretch in curved area (b) Length in curved area
(c) Width in curved area (d) Decoration in curved area

130. Strongest weave in fabric construction is
(a) Plain weave (b) Twill weave
(c) Satin weave (d) Dobby weave

131. _____ is used to remove cocoa stains from clothes
(a) Acetone (b) Hydrogen peroxide
(c) Methylated spirit (d) Ammonia

132. Cerebral palsy is also known as
(a) Vocal disorder (b) Learning disorder
(c) Brain paralysis (d) Creative disorder

133. Which of following is not an element of management process?
(a) Planning (b) Controlleing
(c) Staffing (d) Implementing

134. Metanil yellow is a common adulterant found in
(a) chana daal (b) desi ghee
(c) coriander powder (d) bura

135. We should always used seasonal foods because of
(a) increase in nutrients (b) decrease in price
(c) ease in availability (d) all the above

136. The use of sodium bicarbonate during cooking destroys
(a) Vitamin A and B (b) Vitamin C and D
(c) Vitamin B and C (d) Vitamin A and C

137. MMR stands for
(a) Measles Maturation Rate (b) Measles Mumps Rubella
(c) Mental Morality Rate (d) Mothers Morbidity Rate

138. Accomplishment of the task with proper sequencing of the activities is known as
(a) Work simplification (b) Work organization
(c) Supervision (d) Streamlining

139. Small lights are attached t the middle finger on each hand, and patterns are recorded on a photographic film for later analysis, This method is known as
(a) Micro motion film analysis (b) Chronocyclegraph
(c) Cyclegraph (d) Pathway chat

140. 'Work triangle' in the kitchen indicates the path connecting the
(a) sink, cooking range and preparation centre
(b) sink, microwave and preparation centre
(c) sink, preparation centre and overhead counter
(d) sink, cooking range and refrigerator

141. Which one of the following is not a community resource?
(a) Fodder (b) Fuel (c) Farm (d) Park

142. Which of the method of cooking does not help in fuel conservation?
(a) Use of wide and shallow utensils
(b) Soaking creals and pulse before cooking

(c) Use of well-fitted lids (d) Ensuring yellow colour of flame

143. The capacity of doing work is
(a) stress (b) strain (c) energy (d) management

144. Which of following indicates dullness & brightness of colour?
(a) Hue (b) Chrome (c) Value (d) Intensity

145. Which one of the following is not a tertiary colur?
(a) Red orange (b) Red purple
(c) Blue purple (d) Blue yellow

146. In India the first Home Science College was established by Lady Irwin in
(a) 1938 (b) 1935 (c) 1942 (d) 1932

147. Extension worker act as ------ leader of community
(a) Formal (b) Opinion (c) Informal (d) Local

148. The 'Value' of a colour refers to its
(a) pinkness or redness (b) greyness or dullness
(c) darkness or lightness (d) brightness or dullness

149. Mobile Creche Information Research Centre was set up in January
(a) 1991 (b) 1996 (c) 1986 (d) 1993

150. Development spreads over body form head to foot i.e. individual begins grow from head region to ownwards called
(a) Proximodistal sequence (b) Cephalo-caudal sequence
(c) Predictability (d) Maturation and learning

Answers: **B.Sc.(Hons) 2019-20 – Series- B**

1-d, 2-d, 3-a, 4-c, 5-a, 6-d, 7c, 8-d, 9-d,10-c, 11-c, 12-d, 13-a, 14-b, 15-c, 16-b, 17-a, 18-a, 19-b, 20-a, 21-d, 22-b, 23-a, 24-a, 25-a, 26-d, 27-c, 28-a, 29-b, 30-c, 31-d, 32-c, 33-c, 34-b, 35-a, 36-c, 37-c, 38-b, 39-b, 40-a, 41-c, 42-c, 43-c, 44-d, 45-d, 46-c, 47-a, 48-a, 49-c, 50-a, 51-b, 52-a, 53-d, 54-b, 55-b, 56-d, 57-d, 58-d, 59-b, 60-c, 61-c, 62-b, 63-c, 64-d, 65-a, 66-b, 67-b, 68-c, 69-b, 70-a, 71-c, 72-d, 73-b, 74-c, 75-b, 76-a, 77-a, 78-b, 79-b, 80-d, 81-a, 82-b, 83-a, 84-b, 85-d, 86-c, 87-b, 88-a, 89-b, 90-b, 91-a, 92-b,93-b, 94-d, 95-a, 96-d, 97-d, 98-c, 99-c, 100-a, 101-b,102-b, 103-b, 104-c,105-c, 106-b, 107-b, 108-c, 109-c, 110-a, 111-b, 112-d, 113-b, 114-b, 115-c, 116-c, 117-b, 118-a, 119-b, 120-d, 121-d, 122-d, 123-a, 124-c, 125-b, 126-b, 127-c, 128-b, 129-a, 130-b, 131-b, 132-c, 133-b, 134-a, 135-d, 136-b, 137-b, 138-b, 139-b, 140-d, 141-c, 142-d, 143-c, 144-d, 145-d, 146-d, 147-c, 148-c, 149-a, 150-b .