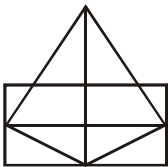






PART - I

IQ (MENTAL ABILITY)

This section contains 20 multiple choice questions. Each question has four choices (1), (2), (3) and (4) out of which ONLY ONE is correct.

1. How many days are there in x weeks x days?
 (1) $6x$ (2) $7x$ (3) $8x$ (4) $9x$
2. If 'eraser' is called 'box', 'box' is called 'pencil', 'pencil' is called 'sharpener' and 'sharpener' is called 'bag'. What will be a child write with
 (1) eraser (2) box
 (3) pencil (4) sharpener
3. **Direction:** A wooden cube is painted blue on all six faces. The side of this cube is 4 cm. It is cut into smaller cubes of side 1 cm. Answer the following question.
 How many cubes have three faces coloured?
 (1) 4 (2) 6 (3) 8 (4) 10
4. Find the number of triangles in the given figure.
 (1) 11
 (2) 13
 (3) 15
 (4) 17


5. Four positions of a dice are shown. Find the number on the face opposite to 3.
 I.  II. 
 III.  IV. 
 (1) 1 (2) 2 (3) 4 (4) 2
6. $3 \begin{matrix} 9 \\ \circlearrowleft 7 \\ 5 \end{matrix} 11$ $110 \begin{matrix} 20 \\ \circlearrowleft 140 \\ 110 \end{matrix} 320$ $1 \begin{matrix} 43 \\ \circlearrowleft 18 \\ ? \end{matrix} 6$
 (1) 11 (2) 22 (3) 33 (4) 44
7. Select the set of conclusion(s) that logically follows from the given statement.
Statement:
 (A) All cups are paper.
 (B) All papers are water.

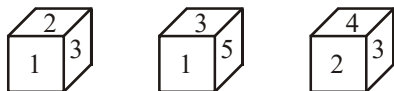
Conclusions:

- I. All cups are water.
 - II. All water are cups.
 - III. Some water are cups.
 - IV. Some water are paper.
- (1) All follow
 - (2) Only I, III and IV follow
 - (3) Only II, III and IV follow
 - (4) Only I and IV follow
8. At what time between 9 and 10 o'clock will the hands of a clock be together?
 (1) $41\frac{9}{11}$ min (2) $49\frac{1}{11}$ min
 (3) $94\frac{1}{11}$ min (4) None of these
 9. In a row of boys facing the North, A is sixteenth from the left end and C is sixteenth from the right end. B, who is fourth to the right of A, is fifth to the left of C in the row. How many boys are there in the row?
 (1) 38 (2) 39 (3) 40 (4) 41
 10. Given two statements (A) and (B) are followed by two conclusions numbered I and II. Read the statements and give answer.
Statements:
 (A) All cats are watches.
 (B) All phones are cats.
Conclusions:
 I. All watches are cats.
 II. Some watches are phones.
 (1) If Only conclusion I follows
 (2) If only conclusion II follows.
 (3) If either I or II follows
 (4) If both I and II follow

11. A father tells his son, "I was of your present age when you were born." If the father is 36 now, how old was the boy five years back?

- (1) 13 yrs (2) 15 yrs (3) 18 yrs (4) 23 yrs

12. A dice is thrown three times and its three different positions are given below. Find the number on the face opposite to 3.

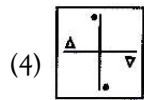
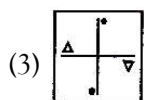
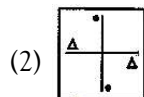
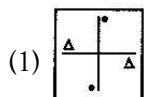
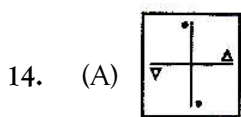


- (1) 1 (2) 6 (3) 5 (4) 4

13. A certain no. of horses and an equal number of men are going somewhere. Half of the owners are on their horse's back while the rest of them are walking along leading their horses. If the number of legs walking on the ground is 70, how many horses are there?

- (1) 10 (2) 12 (3) 14 (4) 16

Direction: In the following question, a figure marked (A) is followed by four figures (1), (2), (3) and (4) which show the possible water-images of figure (A). Choose one out of these four figures which shows the correct water-image of the figure (A) in each case.



15. At what time between 4 and 5 o'clock will the hands of a clock point in opposite direction?

(1) $54\frac{6}{11}$ min past 4

(2) $45\frac{6}{11}$ min past 5

(3) $54\frac{8}{11}$ min past 4

(4) None of these

16. Find out the missing term of the series: 6, 11, 21, 36, 56, ?

- (1) 51 (2) 91 (3) 42 (4) 81

17. What day of the week was on 24th Sep. 1969?

- (1) Monday (2) Tuesday
(3) Wednesday (4) None of these

18. A, B, C and D are playing a game of Ludo. A, C and D, B are partners, D is to the right of C, who is facing East. Then B is facing.

- (1) North (2) South
(3) East (4) West

19. Pointing towards a girl in the picture, Sarita said, "She is the mother of Neha whose father is my son". How is Sarita related to the girl in the picture?

- (1) Mother (2) Aunt
(3) Cousin (4) Mother-in-law

20. In a certain code language, '234' means 'spark and fire', '456' means 'spark is cause' and '258' means 'fire is effect'. Which of the following numerals is used for 'cause'?

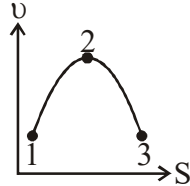
- (1) 3 (2) 4 (3) 5 (4) 6

PART-II
SECTION-A : PHYSICS

This section contains 20 Multiple Choice Questions. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

21. Figure shows the velocity displacement curve for an object moving along a straight line. At which points marked, is the object speeding up?

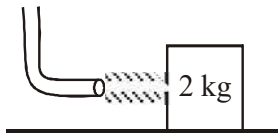
- (1) 1
(2) 2
(3) 1 and 3
(4) 1, 2 and 3



22. A train of mass M is moving on a circular track of radius R with constant speed V . The length of the train is half of the perimeter of the track. The linear momentum of the train will be

- (1) 0
(2) MVR
(3) $2MV$
(4) $\frac{2MV}{\pi}$

23. A block of metal weighing 2 kg is resting on a frictionless plane. It is struck by a jet releasing water at a rate of 1 kg/sec and at a speed of 5 m/sec. The initial acceleration of block is



- (1) 2.5 m/s^2
(2) 5 m/s^2
(3) 1 m/s^2
(4) 1.5 m/s^2

24. Given that $y = a \sin \omega t + bt + ct^2 \cos \omega t$. unit of abc is same as that of

- (1) y
(2) y/t
(3) $\left(\frac{y}{t}\right)^3$
(4) $\left(\frac{y}{t}\right)^2$

25. For motion of an object along x-axis, the velocity v depends on the displacement x as $v = 3x^2 - 2x$. What is the acceleration at $x = 2\text{m}$.

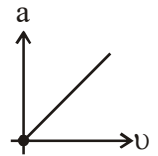
- (1) 48 m/s^2
(2) 80 m/s^2
(3) 18 m/s^2
(4) 10 m/s^2

26. A uniform disc of radius R lies in the x-y plane, with its centre at origin. Its moment of inertia about z axis is equal to its moment of inertia about line $y = x + c$. The value of c will be

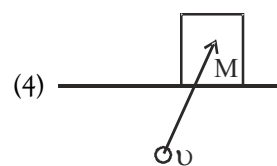
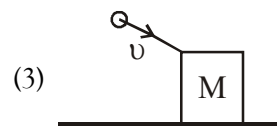
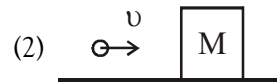
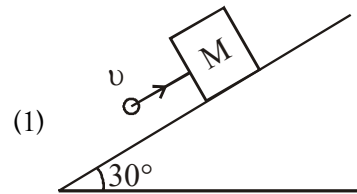
- (1) $-\frac{R}{2}$
(2) $\pm \frac{R}{\sqrt{2}}$
(3) $+\frac{R}{2}$
(4) $-R$

27. Acceleration - velocity graph of a particle moving in a straight line is as shown. Then the slope of velocity - displacement graph:

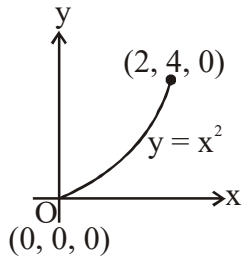
- (1) Increases linearly
(2) Decreases linearly
(3) Is constant
(4) Increases parabolically



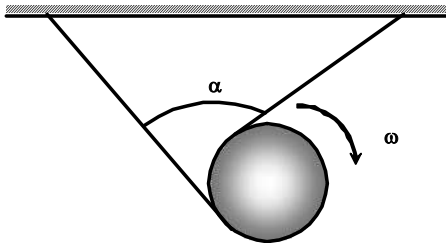
28. In which of the following case is the normal force between stationary block M and surface impulsive?



29. In the relation $\frac{dy}{dt} = 2\omega \sin(\omega t + \phi)$, the dimensional formula for $(\omega t + \phi)$ is
 (1) MLT (2) $M^0L^0T^0$
 (3) ML^0T^0 (4) MLT^0
30. A force $\vec{F} = (3xy - 5z)\hat{j} + 4z\hat{k}$ is applied on a particle. The work done by the force when the particle moves from point $(0, 0, 0)$ to point $(2, 4, 0)$ as shown in the figure is

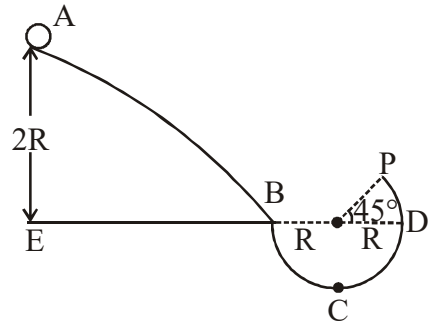


- (1) $\frac{280}{5}$ (2) $\frac{140}{5}$ (3) $\frac{232}{5}$ (4) $\frac{192}{5}$
31. A pump motor is used to deliver water at a certain rate from a given pipe. To obtain 'n' times water from the same pipe in the same time, by what amount the power of the motor should be increased?
 (1) n^2 times (2) n^3 times
 (3) n times (4) $n^{3/2}$ times
32. A heavy disc with radius R is rolling down hanging on two non-stretched string wound around the disc very tightly. The free ends of the string are attached to a fixed horizontal support. The strings are always tensed during the motion. At some instant, the angular velocity of the disc is ω , and the angle between the strings is α . Find the velocity of centre of mass of the disc at this moment.

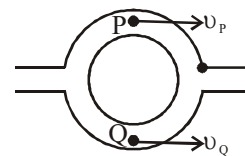


- (1) $\frac{\omega R}{\sin\left(\frac{\alpha}{2}\right)}$ (2) $\frac{\omega R}{\cos\left(\frac{\alpha}{2}\right)}$
 (3) $\frac{2\omega R}{\sin\left(\frac{\alpha}{2}\right)}$ (4) $\frac{2\omega R}{\cos\left(\frac{\alpha}{2}\right)}$

33. A particle of mass m slides on a frictionless surface ABCD, starting from rest as shown in the figure. The part BCD is a circular arc. If it loses contact at point P, the maximum height attained by the particle from lowest point C is



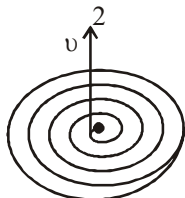
- (1) $R\left[2 + \frac{1}{2\sqrt{2}}\right]$ (2) $\frac{R}{\sqrt{2}}$
 (3) 3R (4) $(2 + \sqrt{2})R$
34. Figure shows a liquid flowing through a tube at the rate of $0.1 \text{ m}^3/\text{sec}$. The tube is branched into two semi circular tubes of cross sectional area $A/3$ and $2A/3$ at P and Q respectively. The velocity of liquid at Q is (the cross section area of the main tube is $A = 10^{-2} \text{ m}^2$ and $v_p = 20 \text{ m/sec}$).



- (1) 5 m/s (2) 30 m/s
 (3) 35 m/s (4) 10 m/s
35. Under the action of a force, a 3 kg body moves such that $x = \frac{t^2}{2}$ where position x is in meter and t is in second. The work done by the force in first 3 second is
 (1) 13.5 J (2) 27 J
 (3) 81 J (4) 109 J

36. A ball of mass m is released from rest relative to elevator at a height h_1 above the floor of the elevator. After making collision with the floor of the elevator it rebounds to height h_2 . The coefficient of restitution for collision is e . For this situation mark the correct statement:
- (1) If elevator is moving down with constant velocity v_0 , then $h_2 = e^2 h_1$.
 - (2) If elevator is moving down with constant velocity v_0 , then $h_2 = e^2 h_1 - \frac{v_0^2}{2g}$.
 - (3) If elevator is moving down with constant velocity v_0 , then impulse imparted by floor of elevator to the ball is $m(\sqrt{29h_2} + \sqrt{29h_1} + 2v_0)$ in the upward direction.
 - (4) If elevator is moving with constant acceleration of $g/4$ in upward direction, then it is not possible to determine a relation between h_1 and h_2 from the given information.

37. A uniform rope of linear mass density λ and length ℓ is coiled on a smooth horizontal surface. One end is pulled up with constant velocity v . Then the average power supplied by the external agent in pulling the entire rope just off the ground is

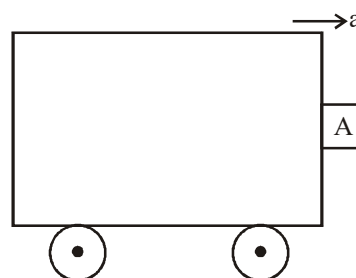


- (1) $\frac{1}{2}\lambda\ell v^2 + \frac{\lambda\ell^2 g}{2}$
- (2) $\lambda\ell g v$
- (3) $\frac{1}{2}\lambda v^3 + \frac{\lambda\ell v g}{2}$
- (4) $\lambda\ell g v + \frac{1}{2}\lambda v^3$

38. A tank is filled with water of density 10^3 kg/m^3 and oil of density $0.9 \times 10^3 \text{ kg/m}^3$. The height of water layer is 1 m and that of the oil layer is 4 m. The velocity of efflux from an opening in the bottom of the tank is

- (1) $\sqrt{85} \text{ m/s}$
- (2) $\sqrt{88} \text{ m/s}$
- (3) $\sqrt{92} \text{ m/s}$
- (4) $\sqrt{98} \text{ m/s}$

39. The minimum acceleration that must be imparted to the cart in the figure so that the block A will not fall (given $\mu = 0.5$ is the coefficient of friction between the surfaces of block and cart) is given by



- (1) 2 m/s^2
- (2) 20 m/s^2
- (3) 5 m/s^2
- (4) 7.5 m/s^2

40. The kinetic energy K of a particle moving along a circle of radius R depends upon the distance δ as $K = a\delta^2$. The force acting on the particle ($a = \text{constant}$)

- (1) $\frac{2a\delta^2}{R}$
- (2) $2a\delta \left[1 + \frac{\delta^2}{R^2} \right]^{1/2}$
- (3) $2a\delta$
- (4) $2a$

SECTION-B : CHEMISTRY

This section contains 20 Multiple Choice Questions. Each question has four choices (1), (2), (3) and (4) out of which ONLY ONE is correct.

41. When lithium is burnt in air, the product obtained is/are
- (1) Li_2O and Li_2O_2
 - (2) Li_2O and Li_3N
 - (3) Li_2O only
 - (4) Li_2O , Li_2O_2 and Li_3N

42. $\text{NaBO}_2 + \text{H}_2\text{O}_2 + \text{H}_2\text{O} \longrightarrow \text{Product}$

Give number of B-O bonds present in the product species

- (1) 4
- (2) 6
- (3) 8
- (4) 9

43. The maximum energy line in the Brackett series of the spectrum of atomic hydrogen is the transition:-
 (1) $n_2 = \infty \rightarrow n_1 = 1$ (2) $n_2 = 8 \rightarrow n_1 = 4$
 (3) $n_2 = \infty \rightarrow n_1 = 4$ (4) $n_2 = 4 \rightarrow n_1 = 3$
44. Sodium metal can be used for drying of
 (1) Ethanol (2) Ammonia
 (3) Dimethyl ether (4) Phenol
45. The effective nuclear charge experienced by the valence electron of potassium will be
 (1) 2.20 (2) 6.20 (3) 7.40 (4) 1.00
46. The pH values 0.1 M solution of HCOONa(I), HCOOH(II), $\text{CH}_3\text{COONH}_4$ (III), NaOH(IV) HCl(V), will be in the order :-
 (1) $\text{IV} > \text{III} > \text{I} > \text{IV} > \text{V}$
 (2) $\text{IV} > \text{I} > \text{III} > \text{II} > \text{V}$
 (3) $\text{II} > \text{III} > \text{I} > \text{IV} > \text{V}$
 (4) $\text{V} > \text{II} > \text{III} > \text{I} > \text{IV}$
47. C-C bond length is maximum in
 (1) Diamond (2) Graphite
 (3) Benzene (4) Acetylene
48. The ratio of the radii of first orbits of H, He^+ and Li^{2+} is :-
 (1) 1 : 2 : 3 (2) 6 : 3 : 2 (3) 1 : 4 : 9 (4) 9 : 4 : 1
49. Which of the following is correct for "Dipole moment"?
 (1) $\text{BF}_3 > \text{NF}_3$ (2) $\text{XeF}_2 > \text{XeO}_2\text{F}_2$
 (3) $\text{CF}_4 > \text{CH}_4$ (4) $\text{NH}_3 > \text{NF}_3$
50. A gaseous mixture contains 1g of H_2 , 4g of He, 7g of N_2 and 8g of O_2 . The gas having the highest partial pressure is :-
 (1) H_2 (2) O_2 (3) He (4) N_2
51. At what temp will the r.m.s velocity of SO_2 gas be the same as that of O_2 gas at 303 K.
 (1) 403 K (2) 303 K (3) 606 K (4) 273 K
52. When 40 cc of slightly moist hydrogen chloride gas is mixed with 20 cc of ammonia gas the final volume of gas left at the same temperature and pressure will be
 $\text{NH}_3(\text{g}) + \text{HCl}(\text{g}) \longrightarrow \text{NH}_4\text{Cl}(\text{s})$
 (1) 20 cc (2) 40 cc
 (3) 60 cc (4) 100 cc
53. For the reaction
 $\text{NH}_4\text{HS}(\text{s}) \rightleftharpoons \text{NH}_3(\text{g}) + \text{H}_2\text{S}(\text{g}); K_p = 0.09 \text{ atm}^2$
 The total pressure at equilibrium is :-
 (1) 0.3 atm (2) 0.09 atm (3) 0.6 atm (4) 0.36 atm
54. An inorganic solid (x) liberates a gas on heating that turns the lime water milky. The same gas is also liberated when salt reacts with dil HCl. The (x) is
 (1) Na_2S (2) NaHCO_3
 (3) Na_2CO_3 (4) $\text{Ca}(\text{HCO}_3)_2$
55. The element with atomic number 37 belongs to
 (1) s-Block (2) p-Block
 (3) d-Block (4) f-Block
56. The correct expression for the vander waal's equation of states is :
 (1) $\left(p + \frac{a}{n^2V^2} \right) (V - nb) = nRT$
 (2) $\left(p + \frac{an^2}{V^2} \right) (V - nb) = \Delta nRT$
 (3) $\left(p + \frac{an^2}{V^2} \right) (V - b) = nRT$
 (4) $\left(p + \frac{an^2}{V^2} \right) (V - nb) = nRT$
57. A molal solution is one that contains one mole of a solute in
 (1) 1000 g of the solvent
 (2) one litre of the solution
 (3) one litre of the solvent
 (4) 22.4 litres of the solution
58. The pH of pure water at 80°C will be :-
 (1) 7 (2) > 7
 (3) < 7 (4) None of these
59. K_p value for
 $\text{C}_2\text{H}_4 + \text{H}_2 \rightleftharpoons \text{C}_2\text{H}_6$ is $5 \times 10^{18} \text{ atm}^{-1}$ and K_p for
 $\text{C}_2\text{H}_2 + \text{H}_2 \rightleftharpoons \text{C}_2\text{H}_4$ is $5 \times 10^{26} \text{ atm}^{-1}$ at 50°C .
 Calculate K_p for the reaction
 $2\text{H}_2 + \text{C}_2\text{H}_2 \rightleftharpoons \text{C}_2\text{H}_6$
 (1) 2.5×10^{45} (2) 21×10^8
 (3) 1.5×10^{-45} (4) 2.5×10^{-45}
60. In a reversible reaction $K_c > K_p$ and $\Delta H = +40 \text{ KCal}$. The product will be obtained in less amount at :-
 (1) High pressure, high temperature
 (2) Low pressure, low temperature
 (3) High pressure, low temperature
 (4) Low pressure, high temperature

Attempt any one of the section C or D

SECTION-C MATHEMATICS

FOR ADMISSION IN ENGINEERING STREAM

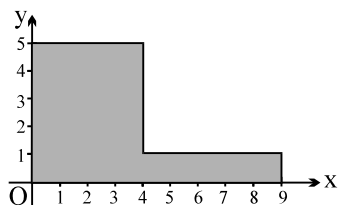
This section contains 20 Multiple Choice Questions. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

- | | |
|--|---|
| <p>61. If the 4th, 7th and 10th term of a G.P. be a, b, c respectively, then the relation between a, b, c is</p> <p>(1) $b = \frac{a + c}{2}$ (2) $a^2 = bc$</p> <p>(3) $b^2 = ac$ (4) $c^2 = ab$</p> <p>62. If the roots of the quadratic equation $ax^2 + bx + c = 0$ are rational and equal then the statement which is True about the graph of $y = ax^2 + bx + c$, is</p> <p>(1) It intersects the x-axis in two distinct points.
 (2) It lies entirely below the x-axis.
 (3) It lies entirely above the x-axis.
 (4) It is tangent to the x-axis.</p> <p>63. If the roots of the equation $(p^2 + q^2)x^2 - 2q(p + r)x + (q^2 + r^2) = 0$ be real and equal, then p, q, r will be</p> <p>(1) A.P.
 (2) G.P.
 (3) H.P.
 (4) None of these</p> <p>64. If the roots of $4x^2 + px + 9 = 0$ are equal, then absolute value of p is</p> <p>(1) 144 (2) 12
 (3) -12 (4) ± 12</p> <p>65. If $\left(a, \frac{1}{a}\right), \left(b, \frac{1}{b}\right), \left(c, \frac{1}{c}\right)$ and $\left(d, \frac{1}{d}\right)$ are four distinct points on a circle of radius 4 units then, abcd is equal to</p> <p>(1) 4 (2) 1/4
 (3) 1 (4) 16</p> | <p>66. If ω be a complex cube root of unity, then the number;</p> <p>$(1 - \omega - \omega^2)^3 + (\omega - 1 - \omega^2)^3 + (\omega^2 - \omega - 1)^3$ is :</p> <p>(1) divisible by 3 but not by 8
 (2) divisible by 8 but not by 3
 (3) divisible by both 3 & 8
 (4) none of these</p> <p>67. Let $z = \frac{3+7i}{2+3i} + \frac{5-8i}{2-3i}$ and $\text{Re}(z) = \alpha$ and $\text{Im}(z) = \beta$ then which one of the following is correct?</p> <p>(1) z is purely real
 (2) z is purely imaginary
 (3) $\alpha + \beta = 5$
 (4) $\alpha - \beta = 3$</p> <p>68. Equation of a straight line which passes through the point of intersection of the lines $3x - 4y + 6 = 0$ and $x + y + 2 = 0$ and has equal intercepts on the coordinates axes, is</p> <p>(1) $x - y + 2 = 0$
 (2) $2x + 2y + 3 = 0$
 (3) $x + y + 2 = 0$
 (4) no such line can be found out</p> <p>69. The value of $\frac{\sum_{r=1}^n \left(\frac{1}{r}\right)}{\sum_{k=1}^n \left[\frac{k}{(2n-2k+1)(2n-k+1)} \right]}$ is :</p> <p>(1) 1 (2) 2
 (3) 4 (4) None of these</p> |
|--|---|

70. As shown in the diagram, region R in the plane has vertices at (0, 0), (0, 5), (4, 5), (4, 1), (9, 1) and (9, 0). There is a straight line $y = mx$ that partitions R into two subregions of equal area. The value of m equals to

(1) $\frac{15}{16}$ (2) 1

(3) $\frac{5}{4}$ (4) $\frac{4}{3}$



71. If $(1 + x - 3x^2)^{2145} = a_0 + a_1x + a_2x^2 + \dots$ then $a_0 - a_1 + a_2 - a_3 + \dots$ ends with
 (1) 1 (2) 3 (3) 7 (4) 9
72. If $\cos A + \cos B + 2\cos C = 2$ then the sides of the ΔABC are in
 (1) A.P. (2) G.P (3) H.P. (4) none
73. If the constant term of the binomial expansion

$\left(2x - \frac{1}{x}\right)^n$ is -160, then n is equal to

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

74. If $\cos\theta = \frac{1}{2}\left(a + \frac{1}{a}\right)$, then the value of $\cos 3\theta$ is :

(1) $\frac{1}{8}\left(a^3 + \frac{1}{a^3}\right)$

(2) $\frac{3}{2}\left(a + \frac{1}{a}\right)$

(3) $\frac{1}{2}\left(a^3 + \frac{1}{a^3}\right)$

(4) $\frac{1}{3}\left(a^3 + \frac{1}{a^3}\right)$

75. If $b_1b_2 = 2(c_1 + c_2)$, then at least one of the equations $x^2 + b_1x + c_1 = 0$ and $x^2 + b_2x + c_2 = 0$ has

- (1) Real roots
 (2) Purely imaginary roots
 (3) Imaginary roots
 (4) None of these

76. A triangle has sides of length 13, 30 and 37. The radius of the inscribed circle is

(1) $7 + \sqrt{2}$ (2) $\frac{9}{2}$

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

77. The co-ordinate of the point on the circle $x^2 + y^2 - 12x - 4y + 30 = 0$, which is farthest from the origin are :

- (1) (9, 3) (2) (8, 5)
 (3) (12, 4) (4) none

78. $\frac{\sin 2A}{1 + \cos 2A} \cdot \frac{\cos A}{1 + \cos A} =$

(1) $\tan \frac{A}{2}$ (2) $\cot \frac{A}{2}$

(3) $\sec \frac{A}{2}$ (4) $\operatorname{cosec} \frac{A}{2}$

79. The solution of the inequality is $(2x - 1)(x - 3) \leq 0$ is.

(1) $\left[\frac{1}{2}, 3\right]$ (2) $\left(-\infty, \frac{1}{2}\right] \cup [3, \infty)$

(3) $(-\infty, 2]$ (4) none of these

80. Let $|z_1| = |z_2| = \frac{c}{2}$ then $|z_1 + z_2|^2 + |z_1 - z_2|^2 =$

- (1) c^2 (2) $c^2/2$
 (3) $2c^2$ (4) none

SECTION-D : BIOLOGY
FOR ADMISSION IN MEDICAL STREAM

This section contains 20 Multiple Choice Questions. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

- | | |
|--|---|
| <p>81. Botanical name of Mango is
(1) <i>Mangifera indiana</i> (2) <i>Mangifera indica</i>
(3) <i>Margosa indica</i> (4) <i>Mangifera nucifera</i></p> <p>82. In <i>selaginella</i> reduction division occurs during the formation of
(1) Sperms (2) Microspores only
(3) Megaspores only (4) Both (1) and (3)</p> <p>83. Suicidal bags of cell are
(1) Ribosome (2) Glyoxysomes
(3) Lysosomes (4) Peroxisomes</p> <p>84. Cell wall of plant cell is made up of
(1) Peptidoglycan
(2) Chitin
(3) Calcium carbonate
(4) Cellulose</p> <p>85. Two common characters found in centipede, cockroach and crab are
(1) compound eyes and anal cerci
(2) jointed legs and chitinous exoskeleton
(3) green gland and tracheae
(4) book lungs and antennae</p> <p>86. Chief function of phloem is the conduction of
(1) Food (2) Mineral
(3) Water (4) Air</p> <p>87. Ommatidia serve the purpose of photoreception in
(1) human (2) sunflower
(3) cockroach (4) frog</p> <p>88. Dark reaction of photosynthesis occurs in which part of chloroplast
(1) Stroma
(2) Grana
(3) Thyllakoid
(4) Granum</p> | <p>89. Coconut's Husk fibre/coir of commercial importance is obtained from
(1) Leaves (2) Stem
(3) Fruit (4) Root & flower</p> <p>90. Most appropriate term to describe the life cycle of <i>Obelia</i> is
(1) neoteny (2) metagenesis
(3) metamorphosis (4) All of these</p> <p>91. Adenine is
(1) purine (2) pyrimidine
(3) nucleoside (4) nucleotide</p> <p>92. An enzyme brings about
(1) decrease in reaction time
(2) increase in reaction time
(3) increase in activation energy
(4) reduction in activation energy</p> <p>93. In Potato edible part is
(1) Root (2) Stem
(3) Leaf (4) Flower</p> <p>94. The simplest type of canal system in <i>Porifera</i> is
(1) ascon type (2) leucon type
(3) sycon type (4) radial type</p> <p>95. <i>Ascaris</i> larva is called
(1) cysticercus
(2) rhabditiform
(3) hexacanth
(4) onchosphere</p> <p>96. In <i>Gymnosperms</i> seeds are
(1) Naked, not produced inside fruit
(2) Produced inside fruit
(3) Not produced
(4) Only flowers are produced</p> |
|--|---|

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97. Which of the following is not a defining feature of living being
- (1) Cellular organisation
 - (2) Consiousness
 - (3) Intrinsic growth
 - (4) Reproduction
98. Lichens are organisms having:
- (1) Algae
 - (2) Algae and Fungi
 - (3) Algae and Bryophyta
 - (4) Fungi and Bryophyta
99. Polynucleate or Multinucleate condition consists of
- (1) 1 nucleus
 - (2) 2 nucleus
 - (3) Many nucleus
 - (4) No nucleus
100. Reptiles of plant kingdom are
- (1) Bryophyta
 - (2) Pteridophyta
 - (3) Gymnosperm
 - (4) Algae.

SPACE FOR ROUGH WORK