MaaRula MCA Entrance Classes

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BHU-MCA-2018

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1. The area bounded by the curves $y^2 = 4x$ and $x^2 = 4y$ is :
(a) $\frac{16}{3}$ sq. units (b) $\frac{8}{3}$ sq. units
(c) $\frac{14}{3}$ sq. units (d) $\frac{3}{14}$ sq. units
2. The coefficient of x^6y^3 in the expansion of $(x + 2y)^9$ is :
(a) 670 (b) 674 (c) 672 (d) 1348
3. The number of terms with integral coefficients in the expansion of $\left(17^{\frac{1}{3}} + 35^{\frac{1}{2}}x\right)^{600}$ is :
(a)200 (b) 301 (c) 100 (d) 101
4. The eccentricity of the conic $9x^2 - 16y^2 = 144$ is :
(a) $\frac{5}{3}$ (b) $\frac{3}{5}$ (c) $\frac{5}{4}$ (d) $\frac{\sqrt{7}}{4}$
5. The principal wants to arrange 5 students on the platform such that the body salim accupies the second position and the girl Sita is always adjacent to the girl Rita. The number of possible arrangement is :
(a) 4 (b) 10 (c) 8 (d) 5
6. In a flight of 600 km an aircraft was slowed down due to bad weather. Its average speed for the trip was reduced by 200 km/hr and the time increased by 30 minutes. Duration of the flight is :
(a) 2 hours (b) 1 hour 20 minutes
(c) 1 hour (d) 30 minutes
7. Find the value of x, if
$$\begin{vmatrix} x-2 & 2x-3 & 3x-4 \\ x-4 & 2x-9 & 3x-16 \\ x-8 & 2x-27 & 3x-64 \end{vmatrix} = 0$$
(a) 2 (b) 3 (c) 4 (d) 5
8. The length of latus-rectum of the parabola $x^2 - 4x - 8y + 12 = 0$ is :
(a) 4 (b) 10 (c) 8 (d) 2
9. If a matrix A is both symmetric and skew symmetric, then :
(a) A is a zero matrix (b) A is a square matrix
(c) A is a scalar matrix (d) A is a diagonal matrix
10. If $f(x) = \log\left(\frac{1+x}{1-x}\right)$, then $f\left(\frac{2x}{1+x^2}\right)$ is equal to :
(a) 2 f(x) (b) 3f (x) (c) $[f(x)]^3$ (d) $[f(x)]^2$
11. The letters of the word 'RANDOM' are written in all possible order and these words are written in dictionary. The rank of word "RANDOM" is :
(a) 614 (b) 600 (c) 610 (d) 612
12. The point on the curve $9y^2 = x^3$, where normal to the curve makes equal intercepts with the axes is :
(a) $\left(2, \sqrt{\frac{8}{3}}\right)$ (b) $\left(2, \pm\frac{2\sqrt{2}}{3}\right)$ c) $\left(4, \frac{8}{3}\right)$ (d) $\left(1, \pm\frac{1}{3}\right)$
13. Probability of solving a problem A, B, C are $\frac{1}{3}, \frac{2}{7}$ and $\frac{3}{8}$ respectively. If all the three try to solve the problem simultaneously, find the probability that exactly one of them can solve it.
(a) $\frac{1}{2}$ (b) $\frac{25}{56}$ (c) $\frac{101}{168}$ (d) $\frac{35}{168}$
14. If $z = \frac{1}{1-\cos\theta-i\sin\theta}$, then Re (z) is equal to :
(a) $\frac{1}{2}$ (b) $\frac{1}{2}$. Cot $\ominus$ (c) Cot $\frac{\ominus}{2}$ (d) 1
15. The value of $\int \sin^{-1}(\cos x)dx, 0 < x < \frac{\pi}{2}$, is (C being constant of integration):
(a) $\frac{\pi}{2}x - \frac{x^2}{2} + C$ (b) $-\frac{\sin x}{\sqrt{1-x^2}} + C$
(c) $\frac{\pi}{2}x + \frac{x^2}{2} + C$ (d) $\frac{\pi}{2} - x + C$
16. How many words can be formed by taking 4 letters at a time out of the letters of the word "MATHEMATICS" ?
(a) 1680 (b) 2625 (c) 2454 (d)1698
17. If $(x + iy)^{1/3} = a + ib$, $x, y, a, b \in R$ then $\frac{x}{a} + \frac{y}{b}$ is equal to :
(a) a – b (b) $4(a^2 - b^2)$ (c) a + b (d) 4 $(a^2 + b^2)$
18. A bag contains 4 red and 4 blue balls. Four balls are drawn one by one from the bag, then the probability that the drawn balls are in alternate colour, is :
(a) $\frac{9}{31}$ (b) $\frac{7}{31}$ (c) $\frac{1}{35}$ (d) $\frac{6}{35}$
19. The value of
$\int \frac{x^2+1}{(x+1)^2}dx$ is (C being constant of integration) :
(a) $x - \log|x + 1| - \frac{1}{x+1} + C$ (b) $x - \frac{2}{x+1} + C$
(c) $x - 2\log|x + 1| - \frac{2}{x+1} + C$ (d) $\log|x + 1| + \frac{1}{(x+1)^2} + C$
20. If the coefficients of three consecutive terms in the expansion of $(1 + x)^n$ are in the ratio 1 : 7 : 42, then value of 'n' is :
(a) 30 (b) 55 (c) 52 (d) 50
21. If a complex number z is given by $z = \frac{1+7i}{(2-i)^2}$, then :
(a) arg (z) = $\frac{5\pi}{4}$ (b) arg (z) = $\frac{\pi}{4}$
(c) arg (z) = $-\frac{\pi}{4}$ (d) arg (z) = $\frac{3\pi}{4}$
22. The quadratic equation $x^2(a^2 + b^2) + 2x(ac + bd) + (c^2 + d^2) = 0$ has no real roots, if
(a) ab = cd (b) ad ≠ bc (c) ab ≠≠ cd (d) ad = bc
23. If the sum of n terms of an A.P. is $3n^2 + 5n$ then which of its terms is 164?
(a) 28^{th} (b) 27^{th} (c) 26^{th} (d) 30^{th}
24. If $(a + b)^2x^2 + 8(a^2 - b^2)x + 16(a - b)^2 = 0$, then the value of x is
(a) $\frac{(b-a)}{a+b}$ (b) $\frac{4(b-a)}{a+b}$ (c) $\frac{a+b}{a-b}$ (d) $\frac{4(a-b)}{a+b}$
25. An arc is in the form of a parabola with its axis vertical and one of its end is at the vertex. The arc is 10m high and 5 m wide at the base. How wide is it 2m from the vertex of parabola?
(a) $\sqrt{5}$m. (b) $\frac{\sqrt{5}}{2}$m. (c) $\sqrt{\frac{5}{2}}$m. (d)2.5m.
26. The sum of all the natural numbers that can be formed with the digit 2, 3, 4, 5 taken all at a time is:
(a) 93240 (b) 93324 (c) 90002 (d) 93004
27. The number of terms in the expansion of $(1 - 3x + 3x^2 - x^3)^8$ is :
(a) 24 (b) 26 (c)25 (d) 32
28. If $y = \sin^{-1}x + \sin^{-1}\sqrt{1 - x^2}$ and $\in (-1, 0)$, then $\frac{dy}{dx}$ is equal to :
(a) $\frac{-1}{\sqrt{1-x^2}}$ (b) $\frac{1}{\sqrt{1-x^2}}$ (c) $\frac{2}{\sqrt{1-x^2}}$ (d) 0
29. If $y = \log_x 2$, then $\frac{dy}{dx}$ is equal to :

(a) $2\log_x 2.\left(\frac{\log_e 2}{x}\right)$ (b) $(\log_x 2).\log_e 2$

(c) $-\frac{1}{(\log_2 x)}.\frac{1}{(x.\log_e 2)}$ (d) $-\frac{1}{(\log_2 x)^2}.\frac{1}{(x\log_e 2)}$

30. If $\frac{3+2i\ \sin\theta}{1-2i\ \sin\theta}$ is a purely real then the value of θ is (n being integer) :

(a) $\theta = \frac{n\pi}{2}$ (b) $\theta = n\pi$

(c) $\theta = \frac{\pi}{2}$ (d) $\theta = (n+1)\frac{\pi}{2}$

31. Two dice are thrown. The probability of getting an odd number on the first die and multiple of 3 on the other, is :

(a) $\frac{1}{3}$ (b) $\frac{5}{6}$ (c) $\frac{1}{6}$ (d) $\frac{1}{5}$

32. For a post three persons A, B and C appear in the interview. The probability of A being selected is twice that of B and the probability of B being selected is thrice that of C. The probability of A being selected is :

(a) $\frac{3}{5}$ (b) $\frac{3}{10}$ (c) $\frac{1}{10}$ (d) $\frac{2}{5}$

33. If B is a matrix, such that

B. $\begin{bmatrix}1 & -2\\ 1 & 4\end{bmatrix} = \begin{bmatrix}6 & 0\\ 0 & 6\end{bmatrix}$, then value of B is :

(a) $\begin{bmatrix}4 & -3\\ 2 & -1\end{bmatrix}$ (b) $\begin{bmatrix}4 & -2\\ -1 & 1\end{bmatrix}$ (c) $\begin{bmatrix}4 & 2\\ -1 & 1\end{bmatrix}$ (d) $\begin{bmatrix}4 & 3\\ 2 & 1\end{bmatrix}$

34. A line passes through the point (3, -2). Then locus of the middle point of the portion of the line intercepted between the axis is :

(a) $3y - 2x = 2xy$ (b) $3x - 2y = 2$

(c) $\frac{2x}{3} + \frac{y}{1} = 1$ (d) $3x - 2y = 2xy$

35. Let 'f' be a real valued function defined on a set $D \subseteq R$ and given by $f(x) = \frac{1}{\log_{10}(1-x)} + \sqrt{x+2}$. Then the set D is :

(a) $[-2, 0) \cup (0, 1)$ (b) $[-2, 1]$

(c) $\{x : x \in R\}$ (d) $x \geq 2$

36. The axes of an ellipse are along the coordinate axes, vertices are at $(0, \pm 10)$ and eccentricity $e = \frac{4}{5}$. The equation of the ellipse is :

(a) $\frac{x^2}{36} + \frac{y^2}{100} = 1$ (b) $\frac{x^2}{164} + \frac{y^2}{36} = 1$

(c) $\frac{x^2}{36} + \frac{y^2}{164} = 1$ (d) $\frac{x^2}{64} + \frac{y^2}{100} = 1$

37. How many words can be formed from the letters of the word "DAUGHTER" so that the vowels are never together?

(a) 36000 (b) 40320

(c) 8! – 6! (d) 4320

38. If ω is a non-real cube root of unity and n is not a multiple of 3, then $\begin{vmatrix}1 & \omega^n & \omega^{2n}\\ \omega^{2n} & 1 & \omega^n\\ \omega^n & \omega^{2n} & 1\end{vmatrix}$ is equal to :

(a) 1 (b) n^2 (c) 2n (d) 0

39. If a line perpendicular to the line segment joining the points (1, 0) and (2, 3) divides in ratio 1 : n then equation of the line is :

(a) $(n+1)x + 3(n+1)y = n + 11$

(b) $(n+1)x - (n-2)y = n + 11$

(c) $nx + (1+n)y = n + 11$

(d) $(n+1)x + 3(n+2)y = n + 10$

40. In how many ways 5 boys and 3 girls can be seated in a row so that no two girls are together?

(a) 14400 (b) 2400 (c) 7200 (d) 1400

41. The 4^{th} term from the end in the expansion of $\left(\frac{3}{x^2} - \frac{x^3}{6}\right)^7$ is :

(a) $\frac{35}{48}x^5$ (b) $\frac{35}{32}x^5$ (c) $\frac{35}{32}x^6$ (d) $\frac{35}{48}x^6$

42. If the third term in the expansion of $\left(\frac{1}{x} + x^{\log_{10} x}\right)^5$ is 1000, then the value of x is :

(a) 100 (b) 10 (c) 21 (d) 50

43. If ${}^nC_{15} = {}^nC_8$, then value of ${}^nC_{21}$ is :

(a) 251 (b) 250 (c) 554 (d) 253

44. A particle moves along a curve $6y = x^3 + 2$ such that at some instant the y-coordinate is changing 8 times as fast as the x-coordinate. The position of the particle at that instant is :

(a) (4, 6) (b) (1, 4) (c) 2, 11) (d) (4, 11)

45. Solution of the inequation given below is :

$$\left|\frac{2}{x-4}\right| > 1, x \neq 4$$

(a) (2, 4) ∪ (4,6) (b) (2, 6) (c) [2, 4) (d) [2, 6]

46. It is given that at x = 1, the function $f(x) = x^4 - 62x^2 + ax + 9$ attains its maximum value on the interval [0, 2], the value of 'a' is :

(a) 120 (b) 100 (c) 140 (d) 119

47. If 'f' is a function satisfying $f(x + y) = f(x).f(y)$ for all $x, y \in N$ such that $f(1) = 3$ and $\sum_{x=1}^{n} f(x) = 120$, then the value of 'n' is :

(a) 7 (b) 4 (c) 8 (d) 6

48. The sum of the series

$$\frac{1}{\log_2 4} + \frac{1}{\log_4 4} + \frac{1}{\log_8 4} + \frac{1}{\log_{16} 4} + \ldots + \frac{1}{\log_2 n^4}$$

is :

(a) $\frac{n(n+1)(2n+1)}{12}$ (b) $\frac{n(n+1)}{4}$

(c) $n.\log_2 4$ (d) $\left[\frac{n(n+1)}{2}\right]^2$

49. The value of $\frac{i^{592} + i^{590} + i^{588} + i^{586} + i^{584}}{i^{582} + i^{580} + i^{578} + i^{576} + i^{574}}$ is $(i = \sqrt{-1})$:

(a) 1 (b) 0 (c) – 1 (d) – 2

50. If $A = \begin{bmatrix}1 & na\\ 0 & 1\end{bmatrix}$, then A^n is equal to $(n \in N)$:

(a) $\begin{bmatrix}1 & na\\ 0 & 1\end{bmatrix}$ (b) $\begin{bmatrix}1 & na\\ 0 & n\end{bmatrix}$ (c) $\begin{bmatrix}n & na\\ 0 & 1\end{bmatrix}$ (d) $\begin{bmatrix}1 & n^2a\\ 0 & 1\end{bmatrix}$

51. The value of $\int e^{2x}\left(\frac{1+\sin 2x}{1+\cos 2x}\right)dx$ is (C being constant of integration):

(a) $e^{2x}\tan x + C$ (b) $e^{2x}\sec^2 x + C$

(c) $\frac{1}{2}e^{2x}\tan x + C$ (d) $\frac{1}{2}e^{2x}\sec^2 x + C$

52. If $S = 1 + \frac{1+2}{2} + \frac{1+2+3}{3} + \frac{1+2+3+4}{4} + \cdots$ n terms then the value of 'S' is :

(a) $\frac{n(n+2)}{4}$ (b) $\frac{n(n+3)}{4}$ (c) $\frac{n(n+1)(2n-1)}{12}$ (d) $\frac{n^2}{2}$

53. Value of x in the inequation $|x - 1| + |x - 2| \geq 4$, is

(a) $\left(-\infty, -\frac{1}{2}\right] \cup \left[\frac{7}{2}\infty\right)$ (b) $\left[-\frac{1}{2}, \frac{7}{2}\right]$

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(c) $\left(-\infty, -\frac{1}{2}\right)$ (d) $\left(-\infty, +\frac{1}{2}\right] \cup \left[\frac{7}{2}, \infty\right]$

54. If R = {(x, y): x, y ∈ Z, $x^2 + y^2 \leq 4$} is a relation defined on the set Z of integers, then the domain of R is :
(a) {1, 2} (b) {-2, -1, 0, 1, 2} (c) {0, 1, 2} (d) {0, 1, 2, 3 ,4}

55. The locus of the point which moves so that the sum of its distance from (3, 0) and (-3, 0) is less than 9, is :
(a) $16x^2 + 20y^2 < 399$ (b) $36x^2 + 20y^2 < 405$
(c) $20x^2 + 36y^2 < 405$ (d) $\frac{x^2}{36} + \frac{y^2}{16} < 1$

56. The equation of the circle passing through (1, 0) and (0, 1) and having the smallest possible radius is :
(a) $x^2 + y^2 - x - y = 0$ (b) $x^2 + y^2 + x - y + 1 = 0$
(c) $x^2 + y^2 + x + y + 1 = 0$ (d) $x^2 + y^2 + x + y = 0$

57. If f : R → R be a function defined by $(f(x) = \frac{x^2}{1+x^2}$, then the range of the function 'f' is :
(a) [0, ∞) (b) R (c) [0, 1) (d) R/{1}

58. The equation of the smallest degree with the real coefficients having (1 + i) as one of the roots is :
(a) $x^2 + x + 1 = 0$ (b) $x^2 + 2x + 2 = 0$
(c) $x^2 - 2x + 2 = 0$ (d) $x^2 + x + 2 = 0$

59. In the first four papers each of 100 marks, Rishi got 95, 72, 73, 83 marks. If the wants an average of greater than or equal to 75 marks and less than 80 marks, the range of marks he should score in the fifth paper, is :
(a) between 55 and 75 marks (b) between 60 and 70 mark
(c) between 70 and 80 marks (d) between 52 and 77 marks

60. Find the least positive integral value of 'k', if

$$\begin{bmatrix} \cos\frac{\pi}{2} & -\sin\frac{2\pi}{2} \\ \sin\frac{2\pi}{2} & \cos\frac{2\pi}{2} \end{bmatrix}^k = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$$

(a) 7 (b) 6 (c) 5 (d) 8

61. If z = 2 – 3i , then value of $4z^3 - 3z^2 + 169$ is :
(a) 199 (b) 140 (c) 160 (d) 0

62. Out of 9 outstanding students in a college, there are 4 boys and 5 firls. A team of 4 students is to be selected for a quiz programme. Find the probability that two are boys and two are girls ?
(a) $\frac{20}{41}$ (b) $\frac{11}{21}$ (c) $\frac{10}{21}$ (d) $\frac{2}{63}$

63. The value of $\int_0^{\frac{\pi}{2}} \sin 2x \log \tan x \, dx$ is :
(a) 2π (b) 1 (c) 0 (d) -1

64. If S_n denotes the sum of first n terms of the series $S_n = 3 + 7 + 13 + 21 + 31 + \cdots$.. to n terms, then the value of S_n is :
(a) $\frac{n}{3}(n^2 + 3n + 5)$ (b) $\frac{n^2}{2}(3n + 5)$
(c) $\frac{n}{6}(n^2 + n + 3)$ (d) $\frac{n}{2}(n^2 + n + 5)$

65. The foci of the hyperbola coincide with the foci of the ellipse $\frac{x^2}{12} - \frac{y^2}{4} = 1$. If eccentricity of the hyperbola is 2, then equation of the hyperbola is :
(a) $\frac{x^2}{12} - \frac{y^2}{4} = 1$ (b) $\frac{x^2}{36} - \frac{y^2}{16} = 1$ (c) $\frac{x^2}{16} - \frac{y^2}{36} = 1$ (d) $\frac{x^2}{4} - \frac{y^2}{12} = 1$

66. The probability that at least one of the events A and B occurs is 0.6. If A and b occur simultaneously with probability 0.2, then $P(\overline{A}) + P(\overline{B})$ is :
(a) 0.4 (b) 1.6 (c) 1.2 (d) 0.8

67. The sum of all 3-digit numbers which leave the remainder 2, when divided by 3, is :
(a) 164850 (b) 109900 (c) 154900 (d) 154850

68. The domain of the function $f(x) = \sqrt{x - 3 - 2\sqrt{x-4}} - \sqrt{x - 3 + 2\sqrt{x-4}}$ is, where 'f' be a real valued function of real variable.
(a) [2, ∞) (b) (−∞, 4] (c) [4, ∞) (d) R^+

69. Set a solution of the equation $z^2 + |z| = 0$, where z is a complex number 9z = x + iy), is :
(a) {0, i, - i} (b) {0, i, 2i} (c) 0, i, 1} (d) {0, 1}

70. If $x = 1 + a + a^2 + a^3 + \cdots \ldots \infty$, $|a| < 1$ and $y = 1 + b + b^2 + b^3 + \cdots \ldots \infty$, $|b| < 1$ then value of $1 + ab + a^2b^2 + a^3b^3 + \cdots . \infty$, is :
(a) xy (b) 1 + xy (c) $\frac{xy}{x+y-1}$ (d) $\frac{1+xy}{x+y+1}$

71. A box contains 5 different re balls and 6 different white balls. In how many ways can 6 balls be selected so that there are at two balls of each colour?
(a) 525 (b) 425 (c) 400 (d) 625

72. In a Geometric Progression (G.P.), if the $(m + n)^{th}$ term is 'p' and $(m - n)^{th}$ term is 'q' then its m^{th} term is :
(a) $\frac{1}{2}(p + q)$ (b) pq (c) p + q (d) $\sqrt{pq}$

73. The number of diagonal with n-sides polygon is :
(a) $\frac{n(n-2)}{2}$ (b) $\frac{n(n-3)}{2}$ (c) $\frac{n(n-2)}{2}$ (d) $\frac{n(n+1)}{2}$

74. If x > 0, then sum of the infinite series
$$\frac{1}{1+x} - \frac{1-x}{(1+x)^2} + \frac{(1-x)^2}{(1+x)^3} - \frac{(1-x)^3}{(1+4)^4} + \cdots .. \infty$$
is :
(a) 0 (b) 1 (c) $\frac{3}{4}$ (d) $\frac{1}{2}$

75. The value of
$\int_0^{\frac{\pi}{4}} \sqrt{1 + \sin 2x} \, dx$ is :
(a) $1 - \sqrt{2}$ (b) 1 (c) $\sqrt{2} - 1$ (d) 0

76. If f(2) = 4 and f′(2) = 1, then value of
$\lim_{x \to 2} \frac{xf(2) - 2f(x)}{x-2}$ is :
(a) 2 (b) 4 (c) 1 (d)0

77. The equation of the parabola, whose vertex is at (2, 1) and directrix is x = y – 1, is given by :
(a) $y^2 = 8x + 1$ (b) $x^2 + 2y^2 - 4x + y = 18$
(c) $x^2 + y^2 - 14x + 2y + 2xy + 17 = 0$ (d) $x^2 - 14x = 4xy$

78. The radius of the circle $25x^2 - 20x + 2y - 60 = 0$ is :
(a) $\frac{16}{25}$ (b) $\frac{\sqrt{464}}{5}$ (c) $\frac{8}{5}$ (d) $\frac{\sqrt{1601}}{25}$

79. In n arithmetic means are inserted between 20 and 80 such that the ratio of the first mean to the last mean is 1 : 3, then the value of 'n' is :
(a) 15 (b) 10 (c) 11 (d) 12

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80. A rod AB of length 15 cm rests in between two coordinates axis in such a that the end point A lies on x-axis and end point B lies on y-axis. A point P is taken on the rod in such a way that AP = 6cm. If the locus of P is an ellipse, then its eccentricity (e) is :

(a) $\sqrt{\frac{117}{81}}$ (b) $\frac{\sqrt{5}}{3}$ (c) $\frac{5}{3}$ (d) $\sqrt{\frac{5}{7}}$

Direction (Question No. 81 to 84) : In each of the following question, a statement/group of statement is given followed by some conclusion, choose the conclusion which logically follows from the given statements.

81. **Statements :**
1. All members of Mohan's family are honest.
2. Some members of Mohan's family are not employed.
3. Some employed persons are not honest.
4. Some honest persons are not employed.

Conclusions:
(1) All members of Mohan's family are
(2) The employed members of Mohan's family are not honest.
(3) The honest members of Mohan's family are not employed
(4) The employed members of Mohan's family are honest

82. **Statements :**
1. Only student can participate in the race.
2. Some participants in the race are females.
3. All females participants in the race are invited for coaching.

Conclusions :
(1) All student are invited for coaching
(2) All participants in the race are invited for coaching
(3) All participants in the race are males.
(4) All participants in the race are students.

83. **Statements :**
1. Processed meat is a perishable food.
2. All perishable foods are packed in sealed tins.
3. Sealed tins some times do not contain processed meat.

Conclusions :
(1) Processed meat is sometimes not packed in sealed tins.
(2) Non – perishable foods are never packed in sealed tins.
(3) Processed meat is always packed in sealed tins
(4) Sealed tins always contain perishable food.

84. **Statements:**
1. I watch T.V only if I am bored.
2. I am never bored when I have my brother's company.
3. Whenever I go to the theatre I take my brother along.

Conclusions :
(1) If I am bored, I watch T.V
(2) If I am bored, I seek my brother's company
(3) If I am not with my brother then I watch T.V.
(4) If I am not bored, I do not watch T.V.

85. In the following question one word is different from the rest. Find out the word which does not belong to the group.
(a) Star (b) Moon (c) Sun (d) Sky

Direction (Question No. 86 to 90) : In each of the following question one number series is given in which one term is wrong. Find out the wrong term.

86. 0, 3, 8, 15, 24, 36, 48
(a) 48 (b) 36 (c)24 (d) 15

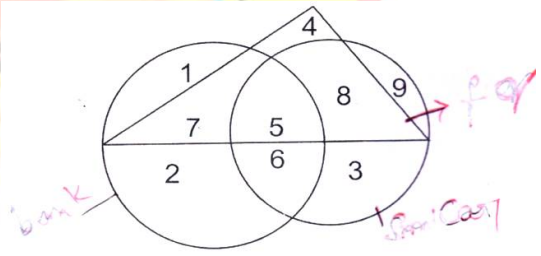
87. 8, 36, 149, 596, 2388, 9556
(a) 596 (b) 149 (c) 9556 (d) 2388

88. 5, 12, 19, 33, 47, 75, 104
(a) 75 (b) 47 (c) 104 (d) 33

89. 4, 11, 21, 34, 49, 69, 91
(a) 49 (b) 21 (c) 34 (d) 69

90. 5, 7, 11, 20, 35, 67
(a) 67 (b) 11 (c) 35 (d) 20

Direction (Question No. 91 to 95) : These question are based on the following diagram in which the triangle represents female graduates. Small circle represents self-employed females having a car and the big circle represents self – employed females with bank loan facility. Numbers are shown in the different sections of the diagram. On the basis of these numbers answer the following question.



91. How many non-graduate females are self –employed?
(a) 12 (b) 11 (c) 21 (d) 9

92. How many female graduates are not self employed?
(a) 10 (b) 12 (c) 15 (d) 4

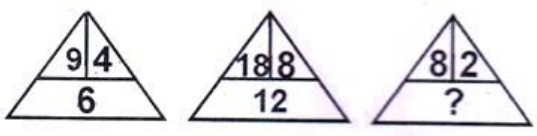
93. How many non-graduate self-employed females are with bank loan facility ?
(a) 3 (b) 12 (c) 8 (d) 9

94. how many female graduate are self – employed and having a car?
(a) 12 (b) 15 (c) 13 (d) 20

95. How many self- employed female graduates are with bank loan facility?
(a) 7 (b) 12 (c) 20 (d) 5

Direction (Question No. 96 to 105) : Which number should came in plane of question mark (?) in the following question.

96.



(a) 5 (b) 7 (c) 6 (d) 4

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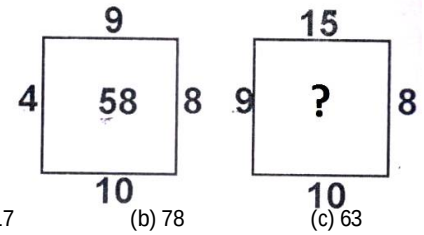
97.



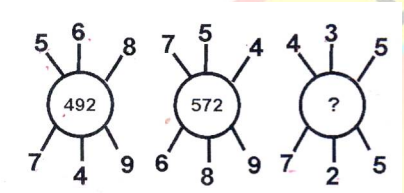
(a) 117 (b) 78 (c) 63 (d) 100

98.

1	7	9
2	14	?
3	105	117

(a) 26 (b) 20 (c) 16 (d) 12

99.

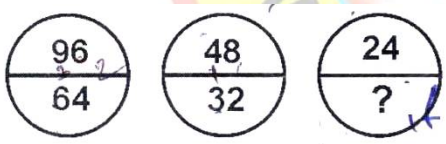


(a) 130 (b) 135 (c) 140 (d) 115

100.

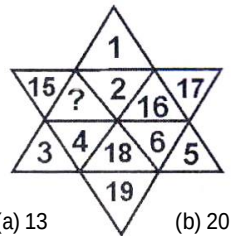
(a) 6 (b) 10 (c) 8 (d) 14

101.



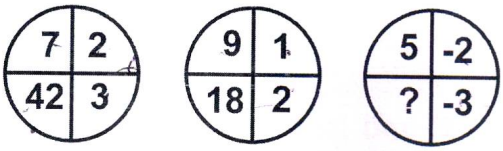
(a) 8 (b) 21 (c) 16 (d) 10

102.



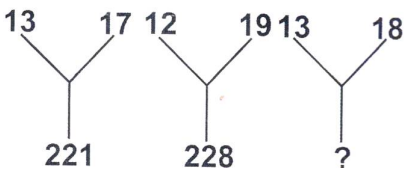
(a) 13 (b) 20 (c) 14 (d) 21

103.



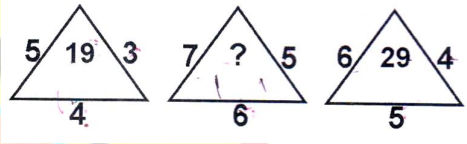
(a) 18 (b) – 30 (c) 30 (d) 13

104.



(a) 312 (b) 229 (c) 31 (d) 234

105.



(a) 47 (b) 25 (c) 41 (d) 37

106. If in a class of 37 student the places of Anuradha and saroj are 10th and 16th respectively, what are their place from the last?
(a) 27th and 21st (b) 28th and 20th
(c) 28th and 22nd (d) 27th and 22nd

Direction (Question N.107 to 109) : In Each of the following problems, there is one question and three statement I, II and III given below the question. You have to decide whether the data given in the statements is sufficient to answer the question. Read all the statement carefully and find out that probable pair which can be sufficient to answer the question. Any one such alternative which contains the statement or a pair of statement sufficient to answer the question, will be your answer. For example, if only statement I is sufficient to answer the question, then statement I and II together should not be accepted as answer to the question. Remember out of the three statement, each of them alone can also be sufficient to answer the question. In such cases for example, your answer should be taken as only I or Only II or Only III not Only I.

107. Five persons – A,B,C,D and E are sitting in a row. who is sitting in the middle?
I. B is between E and C
II. B is to the right of E.
III. D is between A and E.
(a) I and III together (b) II and III together
(c) I, II and III together (d) I and II together

108. What does 'come' represent in a code language?
I. 'pit na tac' means 'come and go' in that code language.
II. 'ja ta da' means 'you are good' in that code

language.
III 'na da rac' means 'you can come' in that code language.

(a) I and III together (b) I, II and III al together

(c) I and II together (d) II and III together

109. Pankaj is younger than Sunita and Rupali is older than Tom. Who among them is the oldest?
I. Rupali is older than Pankaj
II. Sunita is older than Rupali
III. Tom is youngest among all.
(a) I & II together (b) only II
(c) Only III (d) I, II and III all together

Direction (Question No. 110 to 113) : Read the following information carefully and answer the question given below :
Ravi and Kunal are good in Hockey and Volleyball.
Sachin and Ravi are good in Hockey and Baseball.
Gaurav and Kunal are good in Cricket and Volleyball.
Sachin, Gaurav and Michael are good is Football and Baseball.

110. Who is good in Hockey, Baseball and Football?
(a) Kunal (b) Gaurav (c) Sachin (d) Ravi
111. Who is good in Baseball, Volleyball and Hockey?
(a) Ravi (b) Gaurav (c) Sachin (d) Kunal
112. Who is good Hockey, Cricket and Volleyball?
(a) Gaurav (b) Kunal (c) Ravi(d) Sachin
113. Who is good in baseball, cricket, volleyball and football?
(a) Ravi (b) Sachin (c) Gaurav (d) Kunal
114. As ' Author' is related to 'Writing, similarly 'Thief' is related to what?
(a) to night (b) to steal (c) to feel (d) To wonder
115. As 'earthquake' is related to 'Earth', similarly 'Thundering' is related to what?
(a) Earth (b) Sea (c) Fair (d) Sky
116. If the following words are arranged in the dictionary order then which will be the last
(a) dread (b) Drench
(c) Dredge (d) Dream
117. In the following series, find the term in place of question-mark (?) – 3, 8, 27, 112, 565, ?
(a) 3400 (b) 2266
(c) 1596 (d) 3396
118. Letter of which of the alternative answer when placed at the blank places one after another will complete the given letter –series?
(a) a b b a (b) b a c b
(c) c a b a (d) a c b a
119. **Statement :** "Some king are not beggars." If this fact is false then which of the following conclusions is false : -
Conclusions :
I All kings are beggars.
II Some beggars are king.
III Some kings are beggars
IV All beggars are king.
V No king is beggar.
(a) Only I and IV (b) All
(c) Only v (d) Only II and III
120. As a 'Shirt' is related to 'Cloth' in the same way 'Chair' is related to what?
(a) Wood (b) Repairing
(c) Weaving (d) Sit