



ASPIRE STUDY KANPUR

MCA Entrance Classes By Shivam Gupta

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NIMCET MOCK PAPER - 03

- Let a, b, c be positive real numbers. The following system of equations in x, y and z
 $\frac{x^2}{a^2} + \frac{y^2}{b^2} - \frac{z^2}{c^2} = 1$; $\frac{x^2}{a^2} - \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1$; $-\frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1$
 has
 (a) no solution (b) unique solution
 (b) infinitely many solution (d) finitely many solution
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 (a) no solution (b) unique solution
 (b) infinitely many solution (d) finitely many solution
- Given that $b^2 - ac < 0, a > 0$. The value of
 $\Delta = \begin{vmatrix} a & b & ax+by \\ b & c & bx+cy \\ ax+by & bx+cy & 0 \end{vmatrix}$, is
 (a) 0 (b) +ve (c) -ve (d) none
- If $f(x), g(x)$ and $h(x)$ are three polynomials of degree 2,
 then $\phi(x) = \begin{vmatrix} f(x) & g(x) & h(x) \\ f'(x) & g'(x) & h'(x) \\ f''(x) & g''(x) & h''(x) \end{vmatrix}$ is a polynomial of
 degree
 (a) 2 (b) 3 (c) 4 (d) None
- Let $D_r = \begin{vmatrix} a & 2^r & 2^{16}-1 \\ b & 3(4^r) & 2(4^{16}-1) \\ c & 7(8^r) & 4(8^{16}-1) \end{vmatrix}$, then the value of
 $\sum_{k=1}^{16} D_k$, is
 (a) 0 (b) $a + b + c$
 (c) $ab + bc + ca$ (d) none of these
- A integer is chosen at random from the first 200 positive integers. The probability that the integers chosen is divisible by 6 or 8 is
 (a) $1/3$ (b) $1/4$ (c) $1/5$ (d) none
- Odd in favour of an event A are 2 to 1 and odds in favour of $A \cup B$ are 3 to 1. Consistent with this information the smallest and largest values for the probability of event B are given by
 (a) $\frac{1}{6} \leq P(B) \leq \frac{1}{3}$ (b) $\frac{1}{3} \leq P(B) \leq \frac{1}{2}$
 (c) $\frac{1}{12} \leq P(B) \leq \frac{3}{4}$ (d) none of these
- The probability of drawing a diamond card in each of the two consecutive draws from a well shuffled pack of cards, if the card drawn is not replaced after the first draw, is
 (a) $\frac{4}{17}$ (b) $\frac{13}{17}$ (c) $\frac{1}{17}$ (d) none
- A consignment of 15 record players contains 4 defectives. The record players are selected at random, one by one, and examined. The ones examined are not put back. The probability that 9th one examined is the last defective, is
 (a) $({}^4C_3 \times {}^{11}C_5) / {}^{15}C_8$ (b) $({}^4C_3 \times {}^{11}C_5) / (7 \times {}^{15}C_8)$
 (c) ${}^{11}C_5 / 7 \times {}^{15}C_8$ (d) none
- It is given that the events A and B are such that $P(A) = \frac{1}{4}$, $P\left(\frac{A}{B}\right) = \frac{1}{2}$ and $P\left(\frac{B}{A}\right) = \frac{2}{3}$. Then, $P(B)$ is
 (a) $\frac{2}{3}$ (b) $\frac{1}{2}$ (c) $\frac{1}{6}$ (d) $\frac{1}{3}$
- Let A and B two events such that $P(\overline{A \cup B}) = \frac{1}{6}$, $P(A \cap B) = 14$, and $PA = 14$, where \overline{A} stands for complement of event A. Then events A and B are
 (a) mutually exclusive and independent
 (b) independent but not equally likely
 (c) equally likely but not independent
 (d) equally likely and mutually exclusive
- If from each of three boxes containing 3 white and 1 black, 2 white and 2 black, 1 white and 3 black balls, one ball is drawn at random, then the probability that 2 white and 1 black ball will be drawn is
 (a) $\frac{13}{32}$ (b) $\frac{1}{4}$ (c) $\frac{1}{32}$ (d) $\frac{3}{16}$
- Four persons independently solve a certain problem correctly with probabilities $\frac{1}{2}, \frac{3}{4}, \frac{1}{4}, \frac{1}{8}$. Then the probability that the problem is solved correctly by atleast one of them is:
 (a) $\frac{235}{256}$ (b) $\frac{21}{256}$ (c) $\frac{3}{256}$ (d) $\frac{253}{256}$
- Let A, B, C be pair wise independent events with $P(C) > 0$ and $P(A \cap B \cap C) = 0$. Then $P(A' \cap B' / C)$ is equal to
 (a) $P(A') + P(B')$ (b) $P(A') - P(B')$
 (c) $P(A') - P(B)$ (d) $P(A) - P(B')$



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15. A fair die is rolled. The probability that the first time 1 occurs at the even throw, is
(a) $\frac{1}{6}$ (b) $\frac{5}{11}$ (c) $\frac{6}{11}$ (d) $\frac{5}{36}$
16. A problem in mathematics is given to three students A, B, C and their respective probability of solving the problem are $\frac{1}{2}$, $\frac{1}{3}$ and $\frac{1}{4}$. Probability that the problem is solved is
(a) $\frac{3}{4}$ (b) $\frac{1}{2}$ (c) $\frac{2}{3}$ (d) $\frac{1}{3}$
17. A draws two cards at random from a pack of 52 cards. After returning them to the pack and scuffling it, B draws two cards at random. the probability that their draws contain exactly one common cards is:
(a) $\frac{25}{546}$ (b) $\frac{50}{663}$ (c) $\frac{25}{663}$ (d) none
18. Event A, B, C are mutually exclusive events such that $P(A) = \frac{3x+1}{3}$, $P(B) = \frac{1-x}{4}$ and $P(C) = \frac{1-2x}{2}$. The set of all possible values of x are in the interval
(a) $[0, 1]$ (b) $[-\frac{1}{3}, \frac{1}{2}]$
(c) $[\frac{1}{3}, \frac{2}{3}]$ (d) $[\frac{1}{3}, \frac{13}{3}]$
19. Four numbers are multiplied together. Then the probability that the product will be divisible by 5 or 10, is
(a) $\frac{369}{625}$ (b) $\frac{399}{625}$ (c) $\frac{123}{625}$ (d) $\frac{133}{625}$
20. 10 mangoes are to be distributed among 5 persons. The probability that at least one of them will receive none, is
(a) $\frac{35}{143}$ (b) $\frac{108}{143}$ (c) $\frac{18}{143}$ (d) $\frac{125}{143}$
21. The probability that a marksman will hit a target is given as $\frac{1}{5}$. Then the probability that atleast one hit in 10 shots is
(a) $1 - (\frac{4}{5})^{10}$ (b) $\frac{1}{5^{10}}$
(c) $1 - \frac{1}{5^{10}}$ (d) none
22. Five coins are tossed simultaneously. The probability that atleast one head is turning up, is
(a) $\frac{1}{32}$ (b) $\frac{5}{32}$ (c) $\frac{7}{16}$ (d) $\frac{31}{32}$
23. One hundred identical coins, each with probability p , of showing up heads are tossed once. If $0 < p < 1$, and the probability of heads showing on 50 coins is equal to that of heads showing on 51 coins, then the values of p , is
(a) $\frac{1}{2}$ (b) $\frac{49}{101}$ (c) $\frac{50}{101}$ (d) $\frac{51}{101}$
24. Orthocenter of the triangle with vertices $(0,0)$, $(3,4)$ and $(4,0)$ is
(a) $(3, \frac{5}{2})$ (b) $(3, 12)$
(c) $(3, \frac{3}{4})$ (d) $(3, 9)$
25. The harmonic conjugate of $(4, -2)$ with respect to $(2, -4)$ and $(7, 1)$ is
(a) $(-8, -14)$ (b) $(2, 3)$
(c) $(-2, -3)$ (d) $(13, -5)$
26. The number of common tangents to the circles $x^2 + y^2 = 16$ and $x^2 + y^2 - 2x - 4y + 3 = 0$ is
(a) 2 (b) 3 (c) 1 (d) 0
27. If circles $x^2 + y^2 - gx - y = 0$ and $2x^2 + 2y^2 - 4x + 6y + 5 = 0$ intersects orthogonally, then $g =$
(a) -4 (b) 4 (c) -2 (d) 2
28. If two circles intersects a third circle orthogonally, their radical axis
(a) touches the third circle
(b) passes through center of third circle
(c) does not intersects third circle
(d) none of these
29. The radical axis of two circles
(a) always intersects two circles
(b) bisect a line joining centers of two circles
(c) bisect each common tangent
(d) None of these
30. The number of common tangents that can be drawn from the point $(0, 1)$ to the circle $x^2 + y^2 - 2x - 4y = 0$ is
(a) 2 (b) 1 (c) infinite (d) None
31. If lines $2x + 3y + 6 = 0$ and $x + 4y + c = 0$ are conjugate with respect to the circle $x^2 + y^2 = 16$ then c is
(a) 10 (b) $-\frac{1}{2}$ (c) $\frac{112}{3}$ (d) $-\frac{112}{2}$
32. Tangents are drawn to the circle $x^2 + y^2 = 9$ from the point $(5, 4)$, the area of triangle formed by the tangents and the chord of contact is :
(a) 384 (b) $\frac{384\sqrt{2}}{41}$ (c) $\frac{128\sqrt{2}}{41}$ (d) None
33. The coordinates of limiting points of system of coaxial circles whose two members are $x^2 + y^2 + 4x + 4 = 0$ and $x^2 + y^2 + 10x + 24 = 0$, are
(a) $(2, 0)$, $(40, 0)$ (b) $(-2, 0)$, $(-\frac{42}{9}, 0)$
(c) $(6, 0)$, $(46, 0)$ (d) None of these



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34. The locus of the center of circle which cuts the circle $x^2 + y^2 + 2g_1x + 2f_1y + c_1 = 0$ and $x^2 + y^2 + 2g_2x + 2f_2y + c_2 = 0$ orthogonally, is
 (a) an ellipse (b) a conic
 (c) a parabola (d) Radical axis of given circles
35. The radical center of three circles described on the three sides of a triangle as diameter, is
 (a) the orthocenter of triangle
 (b) the incenter of triangle
 (c) the centroid of triangle
 (d) the circumcenter of triangle
36. The angle of intersection of the circles $x^2 + y^2 - x + y - 8 = 0$ & $x^2 + y^2 + 2x + 2y - 11 = 0$, is
 (a) $\tan^{-1} \frac{19}{9}$ (b) $\tan^{-1} 19$
 (c) $\tan^{-1} \frac{9}{19}$ (d) $\tan^{-1} \frac{3}{16}$
37. The equation of the circle passing through the origin and coaxial two circles $x^2 + y^2 = a^2$ and $x^2 + y^2 + 2ax - 2a^2 = 0$ is
 (a) $x^2 + y^2 - 2ax = 0$
 (b) $x^2 + y^2 + 2ax - a^2 = 0$
 (c) $x^2 + y^2 + 2ax = 0$
 (d) None of these
38. A circle passes through (1,2) and cuts orthogonally the circle $x^2 + y^2 = 4$, then
 (a) $2x + 4y = 9$ (b) $2x + 4y = 15$
 (c) $x - y = 8$ (d) $4x + 2y = 8$
39. If chord of contact of tangents drawn from points (h, k) to circle $x^2 + y^2 = a^2$ subtends a right angle at the center, then
 (a) $h^2 + k^2 = a^2$ (b) $2(h^2 + k^2) = a^2$
 (c) $h^2 - k^2 = a^2$ (d) $h^2 + k^2 = 2a^2$
40. The length of the tangent drawn from any point on the circle $x^2 + y^2 + 2gx + 2fy + c = 0$ to the circle $x^2 + y^2 + 2gx + 2fy + c_1 = 0$ is
 (a) $c_1 - c$ (b) $c - c_1$
 (c) $\sqrt{c - c_1}$ (d) $\sqrt{c_1 - c}$
41. If radical axis of the circles $x^2 + y^2 + 2gx + 2fy + c = 0$ and $2x^2 + 2y^2 + 3x + 8y + 2c = 0$ touches the circle $x^2 + y^2 + 2x + 2y + 1 = 0$, then
 (a) $g = \frac{3}{4}$ and $f \neq 2$ (b) $g \neq \frac{3}{4}$ and $f = 2$
 (c) $g = \frac{3}{4}$ or $f = 2$ (d) None of these
42. The equation of the circle described of the common chord of the circles $x^2 + y^2 + 2x = 0$ and $x^2 + y^2 + 2y = 0$ as diameter is
 (a) $x^2 + y^2 + x - y = 0$
 (b) $x^2 + y^2 + x + y = 0$
 (c) $x^2 + y^2 - x + y = 0$
 (d) None of these
43. The distance of the point (1,2) from the radical axis of the circle $x^2 + y^2 + 6x - 16 = 0$ and $x^2 + y^2 - 2x - 6y - 6 = 0$ is
 (a) 1 (b) 2 (c) 3 (d) 4
44. Radical centers of the circles $x^2 + y^2 + 4x = 7$, $2x^2 + 2y^2 + 3x + 5y + 9 = 0$ and $x^2 + y^2 + y = 0$, is
 (a) (-2,1) (b) (-2,-1)
 (c) (2,-1) (d) (-2,-2)
45. The radical axis of two circles $x^2 + y^2 + 2x + 4y - 1 = 0$ and $x^2 + y^2 + 3x + 5y + c = 0$ does not cut the circles, if
 (a) $c > 2 + 2\sqrt{3}$ (b) $c < 1 + 3\sqrt{2}$
 (c) $c > 3\sqrt{2}$ (d) None of these
46. The locus of the center of a circle which touches externally to given circles, is
 (a) parabola (b) circle
 (c) hyperbola (d) None of these
47. If $\vec{a} \times (\vec{b} \times \vec{c}) = (\vec{a} \times \vec{b}) \times \vec{c}$, where \vec{a} , \vec{b} and \vec{c} are any three vectors such that $\vec{a} \cdot \vec{b} \neq 0$, $\vec{b} \cdot \vec{c} \neq 0$, then \vec{a} and \vec{c} are
 (a) inclined at an angle of $\frac{\pi}{6}$ between them
 (b) perpendicular
 (c) parallel
 (d) inclined at an angle of $\frac{\pi}{3}$ between them
48. If \vec{a} is a vector perpendicular to both \vec{b} and \vec{c} , then
 (a) $\vec{a} + (\vec{b} \times \vec{c})$ (b) $\vec{a} \times (\vec{b} \times \vec{c})$
 (c) $\vec{a} \times (\vec{b} \times \vec{c})$ (d) $\vec{a} \times (\vec{b} + \vec{c})$
49. If \vec{a} and \vec{b} are unit vectors, then the vector $(\vec{a} + \vec{b}) \times (\vec{a} \times \vec{b})$ is parallel to the vector
 (a) $\vec{a} - \vec{b}$ (b) $\vec{a} + \vec{b}$
 (c) $2\vec{a} - \vec{b}$ (d) $2\vec{a} + \vec{b}$
50. Volume of the parallelepiped having vertices at $O(0,0,0)$, $A(2,-2,1)$, $B(5,-4,4)$, and $C(1,-2,4)$ is
 (a) 5 cu units (b) 10 cu units
 (c) 15 cu units (d) 20 cu units



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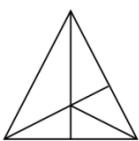
Logical & Reasoning

51. In a certain code language, "POPULAR" is written as "QPQVMBS". How is "GBNPVT" written in that same code?
 (a) FASOUM (b) FAMOUS
 (c) FAMOSU (d) FAMSUO
52. In a certain code language, "CROWNED" is written as "PSDVEFO". How is "STREAMS" written in that same code?
 (a) SUTDBNT (b) TUSDTNB
 (c) SUTDTNT (d) None of these
53. Introducing a girl, Amit said, "This girl is the wife of the grandson of my mother." How is Amit related to that girl?
 (a) Father (b) Father-in-law
 (c) Grandfather (d) Husband
54. Pointing to a man in a photograph, Reena said, "His mother's only daughter is my mother." How is Reena related to that man?
 (a) Nephew (b) Sister
 (c) Niece (d) Wife
55. The calendar for the year 2005 is the same as for the year :
 (a) 2010 (b) 2011
 (c) 2012 (d) 2013
56. How many squares does the figure have ?



- (a) 17 (b) 12 (c) 13 (d) 15

57. How many triangles does the following figure contain ?



- (a) 11 (b) 10 (c) 6 (d) 12

Questions: (58-60)

- (i) 'P x Q' means 'P is brother of Q'.
 (ii) 'P - Q' means 'P is mother of Q'.
 (iii) 'P + Q' means 'P is father of Q'.
 (iv) 'P ÷ Q' means 'P is sister of Q'.

58. Which of the following means 'M is niece of N' ?
 (a) $M \times R - N$ (b) $N \div J + M \div D$
 (c) $N \div J + M$ (d) $N \times J - M$
59. Q. 12. Which of the following means "B is grandfather of F" ?
 (a) $B + J - F$ (b) $B - J + F$
 (c) $B \times T - F$ (d) $B \div T + F$
60. Q. 13. How is M related to K in the expression 'B + K ÷ T × M' ?
 (a) Son (b) Daughter

- (c) Son or daughter (d) Data inadequate

61. Four of the following five are alike in a certain way and hence form a group. Which one of the following does not belong to that group?
 (a) 7 (b) 5 (c) 9 (d) 17
62. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
 (a) 15625 (b) 676
 (c) 4096 (d) 729
63. Three pipes A, B and C can fill a tank from empty to full in 30 minutes, 20 minutes and 10 minutes respectively. When the tank is empty, all the three pipes are opened. A, B and C discharge chemical solutions P, Q and R respectively. What is the proportion of solution R in the liquid in the tank after 3 minutes?
 (a) $\frac{5}{11}$ (b) $\frac{6}{11}$ (c) $\frac{7}{11}$ (d) $\frac{8}{11}$
64. Two pipes A and B can separately fill a cistern in 60 minutes and 75 minutes respectively. There is a third pipe in the bottom of the cistern to empty it. If all the three pipes are simultaneously opened, then the cistern is full in 50 minutes. In how much time, the third pipe alone can empty the cistern?
 (a) 90 min (b) 100 min
 (c) 110 min (d) 120 min
65. The total of the ages of Jayant, Prem and Saransh is 93 years. Ten years ago, the ratio of their ages was 2 : 3 : 4. What is the present age of Saransh ?
 (a) 24 years (b) 32 years
 (c) 34 years (d) 38 years

Directions (Q. 66-70)-Study the following information carefully and answer the questions that follow :

- Madhu and Shobha are good in Dramatics and Computer Science.
 - Anjali and Madhu are good in Computer Science and Physics.
 - Anjali, Poonam and Nisha are good in Physics and History.
 - Nisha and Aryali are good in Physics and Mathematics.
 - Poonam and Shobha are good in History and Dramatics.
66. Who is good in Computer Science, History and Dramatics ?
 (a) Anjali (b) Madhu
 (c) Shobha (d) Nisha



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67. Who is good in Physics, Dramatics and Computer Science?
(a) Shobha (b) Poonam
(c) Madhu (d) Anjali
68. Who is good in Physics, History and Dramatics ?
(a) Poonam (b) Shobha
(c) Madhu (d) Anjali
69. Who is good in History, Physics, Computer Science and Mathematics ?
(a) Poonam (b) Nisha
(c) Madhu (d) Anjali
70. Who is good in Physics, History and Mathematics but not in Computer Science ?
(a) Madhu (b) Poonam
(c) Nisha (d) Anjali
71. J Ravi is not wearing white and Ajay is not wearing blue. Ravi and Sohan wear different colours. Sachin alone wears red. What is Sohan's colour, if all four of them are wearing different colours ?
(a) Red (b) Blue
(c) White (d) Can't say
- Directions (Q.72- 73)Study the following information and answer the questions given below i :**
- I. Kailash, Govind and Harinder are intelligent.
II. Kailash, Rajesh and Jitendra are hard-working.
III. Rajesh, Harinder and Jitendra are honest.
IV. Kailash, Govind and Jitendra are ambitious.
72. Which of the following persons is neither hard-working nor ambitious ?
(a) Kailash (b) Govind
(c) Harinder (d) Rajesh
73. Which of the following persons is neither honest nor hard-working but is ambitious?
(a) Kailash (b) Govind
(c) Rajesh (d) Harinder
- Direction (Q 74-77) : Read the following information and answer the questions that follow :**
Four youngmen Raj, Prem, Ved and Ashok are friendly with four girls Sushma, Kusum, Vimla and Poonam. Sushma and Vimla are friends. Ved's girlfriend does not like Sushma and Vimla. Kusum does not care for Ved. Prem's girlfriend is friendly with Sushma. Sushma does not like Raj.
74. Who is Raj's girlfriend ?
(a) Sushma (b) Kusum
(c) Vimla (d) Poonam
75. With whom is Sushma friendly ?
(a) Raj (b) Prem
(c) Ved (d) Ashok
76. Who is Poonam's boyfriend?
(a) Ashok (b) Ved
(c) Prem (d) Raj
77. Who does not like Sushma and Vimla ?
(a) Poonam (b) Raj
(c) Ashok (d) Ved
78. In a cricket season, India defeated Australia twice. West Indies defeated India twice, Australia defeated West Indies twice, India defeated New Zealand twice and West Indies defeated New Zealand twice. Which country, has lost most number of times ?
(a) India (b) Australia
(c) New Zealand (d) West Indies
79. A man walking at 3km/hr crosses a square field diagonally in 2 minute. The area of the field is :
(a) 25 acres (b) 30 acres
(c) 45 acres (d) 50 acres
80. b _ b _ bb _ _ bbb _ bb _ b
(a) bbbba (b) bbaaab
(c) ababab (d) aabaab
81. PALE is coded as 2134, EARTH is coded as 41590, how is PEARL coded in that code?
(a) 29530 (b) 24153
(c) 25413 (d) 25430
82. Deepak said to Nitin, "That boy playing with the football is the younger of the two brothers of the daughter of my father's wife." How is the boy playing football related to Deepak ?
(a) Son (b) Brother
(c) Cousin (d) Nephew
83. ?, 3, 3, 9, 27, 243
(a) 0 (b) 2 (c) 1 (d) 1/3
84. 9, 22, 48, 87, ?
(a) 139 (b) 152 (c) 126 (d) 132
85. A takes twice as much time as B or thrice as much time to finish a piece of work. Working together, they can finish the work in 2 days. B can do the work alone in
(a) 4 days (b) 6 days
(c) 8 days (d) 12 days
86. X can do $\frac{1}{4}$ of a work in 10 days, Y can do 40%



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of the work in 40 days and Z can do $\frac{1}{3}$ of the work in 13 days. Who will complete the work first ?

- (a) X (b) Y (c) Z (d) X and Z both

Directions (Q87 -90): Seven persons namely Paramjit, Tarun, Morya, Jeeva, Vaani, Ram and Waqar are good friends and are studying in M.Com, M.A. and M.Sc courses. Three are doing M.Com, two are in M.A. and another two are in M.Sc. Each of them has a very distinct and favorite color choice ranging from blue, red, yellow, white, black, pink and brown but not necessarily in the same order. None doing M.Com like either red or black. Morya is doing M.A. and he likes blue. Ram is doing M.Sc and likes brown. Jeeva is doing M.Com and likes yellow. Paramjit who does not like red is in the same discipline of Ram. Tarun is in the same discipline of Morya. Vaani does not like pink.

87. Which among the following groups is doing M. Com?
- (a) Jeeva, Vaani and Waqar
(b) Vaani, Waqar and Tarun
(c) Jeeva, Vaani and Tarun
(d) Jeeva, Paramjit and Ram
88. What is the color combination choice of those who are in M.Sc discipline?
- (a) Brown and Pink
(b) Black and White
(c) Black and Brown
(d) Yellow and Black
89. Which color does Vaani like?
- (a) Yellow
(b) Pink
(c) White
(d) Brown
90. What is the color combination choice of those who are in M.A. discipline?
- (a) Red and Black
(b) Blue and Red
(c) Blue and Black
(d) None of The Above

General English

Directions: In each of the following questions, out of the given alternatives, choose the one which can replace the word printed in bold in the sentence without changing the meaning of the

sentence.

91. She is really a *fantastic* girl.
- (a) Wonderful
(b) Charming
(c) Beautiful
(d) Intelligent
92. The old man was fond of giving *homilies* whenever we went to him with a problem.
- (a) Alternatives
(b) Advice
(c) Suggestions
(d) Sermon
93. The soldier displayed *exceptional* courage and saved the Major from the enemy's hand.
- (a) New
(b) Strange
(c) Abnormal
(d) Unusual
(e) Avoidable
94. If you want the quality of your writings, to improve then avoid *redundant* words
- (a) Unwilling
(b) Mistaken
(c) Wrong
(d) Repetitive
95. In order to tarnish the public image of his opponent, he has got a *mendacious* story



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planted in the local newspaper.

- (a) False
- (b) Fabricated
- (c) Imaginary
- (d) Horrible

96. A civilized Roman **banquet** was a thing of great richness, style and decorum.

- (a) Palace
- (b) Feast
- (c) Ornament
- (d) Table

97. He listened to her mellifluous music under the **genial** influence of wine.

- (a) Heavy
- (b) Stressing
- (c) Drowsy
- (d) Sympathetic

98. The fishing boat pulled away from the **wharf** and chugged smoothly down the bay.

- (a) Harbor
- (b) Shore
- (c) Quay
- (d) Anchor

99. The **aberration** in the Indian economy can be attributed to short-sightedness of its political masters

- (a) Deviation

(b) Steadfastness

- (c) Privilege
- (d) Procrastination

100. India has too often to **fulminate** against Pakistanis role in aiding and abetting acts of militancy on her soil.

- (a) Think
- (b) Consider
- (c) Conspire
- (d) Protest

101. The accident occurred due to his **lapse**.

- (a) Haste
- (b) Error
- (c) Ignorance
- (d) Carelessness

102. It was **incumbent** on him to report the matter at once.

- (a) Pointless
- (b) Depending
- (c) Pressing
- (d) Optional

103. Only my neighbor **succoured** me during my illness.

- (a) Nourished
- (b) Treated
- (c) Aided
- (d) Attended



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104. As they whispered, I felt *awkward* in their company.

- (a) Inconvenient
- (b) Clumsy
- (c) Ashamed
- (d) Embarrassed

105. He tried to *cajole* her, but it was in vain.

- (a) Enjoin
- (b) Coax
- (c) Rejoice
- (d) Inspire

106. He was annoyed at his *flippant* remark.

- (a) Discourteous
- (b) Hitter
- (c) Humorous
- (d) Casual

107. The magazine was *embellished* with amusing articles.

- (a) Filled
- (b) Replete
- (c) Adorned
- (d) Sprinkled

108. Summit *neglected* to remit the fees in time and therefore had to pay a fine.

- (a) Exempted
- (b) Refused

(c) Failed

(d) Promised

(e) Obstructed

109. 'To be or not to be' was the *dilemma* of Hamlet.

(a) Question

(b) Obsession

(c) Problem

(d) Helplessness

(e) Confusion

110. War always has a *baneful* effect on the people of a nation.

(a) Unpleasant

(b) Foul

(c) Pernicious

(d) Harmful

111. The number 46 in 2's complement representation is

- | | |
|--------------|--------------|
| (a) 01010101 | (b) 11010101 |
| (c) 00101011 | (d) 10101011 |

112. 2's complement representation of $(-539)_{10}$ in hexadecimal is

- | | | | |
|---------|---------|---------|---------|
| (a) ABE | (b) DBC | (c) DE5 | (d) 9E7 |
|---------|---------|---------|---------|

113. What is equivalent value for the decimal value 0.25

- (a) $(0.1)_2$
- (b) $(0.01)_2$
- (c) $(0.00111...)_2$
- (d) Can't be represented precisely

114. 2's complement representation of decimal value (-15) is

- | | |
|------------|-----------|
| (a) 1111 | (b) 11111 |
| (c) 111111 | (d) 10001 |

115. Assume all numbers are in 2's complement form, which of the following number is



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divisible by 11111011?

- (a) 11100111 (b) 11100100
(c) 11010111 (d) 11011011

116. If $(73)_x = 54_y$, then the possible values of x and y are

- (a) 8, 16 (b) 10, 12 (c) 9, 13 (d) 8, 11

117. Let $A = 11111010$ and $B = 00001010$ be two 8-bit 2's complement numbers. Their product in 2's complement is

- (a) 11000100 (b) 10011100
(c) 10100101 (d) 11010101

118. An 8085 microprocessor executes the following instruction: Two numbers are represented in signed 2's complement form as $P=11101101$ and $Q=11100110$. If Q is subtracted from P , the value obtained in signed 2's complement form is

- (a) 100000111 (b) 00000111
(c) 11111001 (d) 011111001

119. If $(11X1Y)_8 = (12C9)_{16}$ then the values of X and Y are

- (a) 3, 1 (b) 5, 7 (c) 7, 5 (d) 1, 5

120. Binary data is being represented in size of byte and in 2's complement form. The number of 0's present in representation of $(-127)_{10}$ is

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

| | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 1.B | 2.D | 3.C | 4.D | 5.A | 6.B | 7.C | 8.C | 9.B | 10.D |
| 11.B | 12.A | 13.A | 14.C | 15.B | 16.A | 17.B | 18.B | 19.A | 20.D |
| 21.A | 22.D | 23.D | 24.C | 25.A | 26.D | 27.B | 28.B | 29.C | 30.C,D |
| 31.C | 32.B | 33.B | 34.* | 35.B | 36.C | 37.A | 38.A | 39.D | 40.D |
| 41.C | 42.B | 43.A | 44.B | 45.A | 46.C | 47.C | 48.C | 49.A | 50.B |
| 51.B | 52.C | 53.B | 54.B | 55.C | 56.A | 57.D | 58.B | 59.A | 60.D |
| 61.A | 62.B | 63.B | 64.B | 65.D | 66.C | 67.C | 68.A | 69.D | 70.C |
| 71.D | 72.C | 73.B | 74.B | 75.D | 76.B | 77.A | 78.C | 79.A | 80.C |
| 81.B | 82.B | 83.C | 84.A | 85.B | 86.C | 87.A | 88.C | 89.C | 90.B |
| 91.A | 92.D | 93.D | 94.D | 95.A | 96.B | 97.B | 98.C | 99.A | 100.D |
| 101.B | 102.C | 103.C | 104.D | 105.B | 106.A | 107.C | 108.C | 109.E | 110.C |
| 111.B | 112.C | 113.B | 114.D | 115.B | 116.D | 117.A | 118.B | 119.A | 120.C |