

SECTION-A

1. If A, B, C be three sets such that $A \cup B = A \cup C$ and $A \cap B = A \cap C$, then

(a) $A = B$ (b) $B = C$
(c) $A = C$ (d) $A = B = C$

2. The rank of matrix $\begin{vmatrix} -1 & 2 & 5 \\ 2 & -4 & a-4 \\ 1 & -2 & a+1 \end{vmatrix}$ is :

(a) 1 if $a = 6$ (b) 1 if $a = 4$
(c) 3 if $a = 2$ (d) 1 if $a = -6$

3. If $x = \log_a(bc)$, $y = \log_b(ca)$, $z = \log_c(ab)$, then which of the following is equal to 1

(a) $x + y + z$ (b) $(1+x)^{-1} + (1+y)^{-1} + (1+z)^{-1}$
(c) xyz (d) None of these

4. If $\log_{\sqrt{3}} 5 = a$ and $\log_{\sqrt{3}} 2 = b$, then $\log_{\sqrt{3}} 300 =$

(a) $2(a+b)$ (b) $2(a+b+1)$
(c) $2(a+b+2)$ (d) $a+b+4$

5. If r and s are the roots of the equation $ax^2 + bx + c = 0$, $rs = -3$ and a, b, c are in A.P., then $r + s =$

(a) -4 (b) -1 (c) 4 (d) -2

6. If three positive real numbers a, b, c are in A.P. and $abc = 4$, then the minimum possible value of b is

(a) $2^{3/2}$ (b) $2^{2/3}$ (c) $2^{1/3}$ (d) $2^{5/3}$

7. The length of the intercept on the x-axis cut by the pair of lines $2x^2 + 5xy + 3y^2 + 6x + 7y + 1 = 0$ is :

(a) $\sqrt{7}$ (b) $2\sqrt{7}$ (c) $\frac{\sqrt{7}}{2}$ (d) $\sqrt{2}$

8. If $1 + \sin x + \sin^2 x + \dots$ up to $\infty = 4 + 2\sqrt{3}$, $0 < x < f$

and $x \neq \frac{f}{2}$, then $x =$

(a) $\frac{f}{3}, \frac{2f}{3}$ (b) $\frac{f}{6}, \frac{f}{3}$ (c) $\frac{f}{3}, \frac{5f}{6}$ (d) $\frac{2f}{3}, \frac{f}{6}$

9. If $\tan^{-1} x + \tan^{-1} y + \tan^{-1} z = \pi$, then $\frac{1}{xy} + \frac{1}{yz} + \frac{1}{zx} =$

(a) 0 (b) 1 (c) $\frac{1}{xyz}$ (d) xyz

10. The number of values of x in the interval $[0, 5\pi]$ satisfying the equation $3\sin^2 x - 7\sin x + 2 = 0$ is

(a) 0 (b) 5 (c) 6 (d) 10

11. If one root of the equation $x^2 + px + 12 = 0$ is 4, while the equation $x^2 + px + q = 0$ has equal roots, then the value of q is :

(a) 4 (b) 12 (c) $29/4$ (d) $49/4$

12. Given $\tan A$ and $\tan B$ are the roots of $x^2 - ax + b = 0$, then the value of $\sin^2(A+B)$ is :

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

13. The first term of an A.P. of consecutive integers is $p^2 + 1$. The sum of $(2p+1)$ terms of the series can be expressed as :

(a) $(p+1)^2$ (b) $(2p+1)(p+1)^2$
(c) $(p+1)^3$ (d) $p^3 + (p+1)^3$

14. If $\frac{a}{b+c}, \frac{b}{c+a}, \frac{c}{a+b}$ are in A.P., then :

(a) a, b, c are in A.P. (b) c, a, b are in A.P.
(c) a^2, b^2, c^2 are in A.P. (d) a, b, c are in G.P.

15. If $A = \{1, 3, 5, 7, 9, 11, 13, 15, 17\}$ and $B = \{2, 4, \dots, 18\}$ and N is the universal set, then $A^c \cup ((A \cup B) \cap B^c)$ is :

(a) A (b) N (c) B (d) none

16. If a, b, c are in A.P., a, mb, c are in G.P. then a, m^2b, c are in :

(a) A.P. (b) G.P. (c) H.P. (d) none

17. If $x^2 + px + q = 0$ and $x^2 + qx + p = 0$ have only one common root, then $p + q =$

(a) -1 (b) 0 (c) 1 (d) none

18. The smallest positive root of the equation $\tan x - x = 0$, lies in :

(a) $\left(0, \frac{\pi}{2}\right)$ (b) $\left(\frac{\pi}{2}, \pi\right)$ (c) $\left(\pi, \frac{3\pi}{2}\right)$ (d) $\left(\frac{3\pi}{2}, 2\pi\right)$

19. In a group of 52 persons, 16 drink tea but not coffee and 33 drink tea. Then the number of persons who take coffee but not tea is given by :
(a) 19 (b) 36 (c) 26 (d) none

20. If $x = \log_{5\sqrt{5}}\left(\frac{1}{625}\right)$ then $x =$
(a) 3 (b) -1/3 (c) -3 (d) 1/3

21. If r and S are the roots of $x^2 - px + q = 0$ then

$$p^3 - 3pq =$$

- (a) $r^3 + S^3$ (b) $r^3 - S^3$
(c) $r^3 + S^3 + rs$ (d) $r^3 - S^3 + rs$

22. The most general value of θ , satisfying the two equations,

$$\cos \theta = -\frac{1}{\sqrt{2}}, \tan \theta = 1 \text{ is :}$$

- (a) $2n\pi \pm \frac{5\pi}{4}$ (b) $2n\pi + \frac{\pi}{4}$
(c) $n\pi + \frac{5\pi}{4}$ (d) $(2n+1)\pi + \frac{\pi}{4}$

23. The number of arrangements which can be made using all the letters of the word 'LAUGH' if the vowels are adjacent is :

- (a) 10 (b) 24 (c) 48 (d) 120

24. In $(-4, 4)$ the function $f(x) = \int_{-10}^x (t^4 - 4)e^{-4t} dt$ has

- (a) No extrema (b) One extremum
(c) Two extrema (d) Four extrema

25. The letters of the word 'BAZAR' are arranged in dictionary, then what is the 50th word ?

- (a) ZAABR (b) ZBAAR (c) ZBRAA (d) ZAARB

26. $\left(\frac{1}{\sqrt{27}}\right)^{2 - \left(\frac{\log_5 16}{2 \log_5 9}\right)} =$

- (a) $\frac{\sqrt{2}}{27}$ (b) $\frac{2\sqrt{2}}{27}$ (c) $\frac{4}{27}$ (d) $\frac{4\sqrt{2}}{27}$

27. If $U_n = \sin n_n \sec^n n_n$, $V_n = \cos n_n \sec^n n_n$ then

$$\frac{V_n - V_{n-1}}{U_{n-1}} + \frac{1}{n} \frac{U_n}{V_n} \text{ is equal to :}$$

- (a) $\cot n_n$ (b) $\tan n_n$
(c) $\frac{\tan n_n}{n} - \tan n_n$ (d) none of these

28. If $\sec n_n + \tan n_n = p$, then which one is not correct ?

- (a) $\sec n_n = \frac{p^2 + 1}{2p}$ (b) $\tan n_n = \frac{p^2 - 1}{2p}$
(c) $\tan n_n = \frac{2p}{p^2 - 1}$ (d) $\sin n_n = \frac{p^2 - 1}{p^2 + 1}$

29. If $\tan n_n + \sin n_n = m$ and $\tan n_n - \sin n_n = n$, then $m^2 - n^2$ equals :

- (a) $2\sqrt{mn}$ (b) $4\sqrt{mn}$ (c) \sqrt{mn} (d) none

30. If $\tan^2 r \tan^2 S + \tan^2 S \tan^2 X \tan^2 r + 2 \tan^2 r \tan^2 S \tan^2 X = 1$ then $\sin^2 r \sin^2 X$ is equal to :

- (a) 1 (b) 0 (c) 4 (d) 2

31. If $r = \tan 27_n - \tan n_n$ and

$$S = \frac{\sin n_n}{\cos 3_n} + \frac{\sin 3_n}{\cos 9_n} + \frac{\sin 9_n}{\cos 27_n}, \text{ then :}$$

- (a) $r = S$ (b) $r = 2S$
(c) $S = 2r$ (d) None of these

32. The value of the natural numbers n such that the inequality $2^n > 2n+1$ is valid is

- (a) For $n \geq 3$ (b) For $n < 3$
(c) For mn (d) For any n

33. The determinant $\begin{vmatrix} a & b & a-b \\ b & c & b-c \\ 2 & 1 & 0 \end{vmatrix}$ is equal to zero if a, b, c

- are in
(a) G. P. (b) A. P.
(c) H. P. (d) None of these

34. Given $\sin^2 n_n + \cos^4 n_n \forall$ values of n_n , then :

- (a) $1 \leq A \leq 2$ (b) $3/4 \leq A \leq 1$
(c) $-\frac{13}{6} \leq A \leq 1$ (d) $\frac{3}{4} \leq A \leq \frac{13}{6}$

35. A cricket club has 15 members, of whom only 5 can bowl. If the names of 15 members are put into a box and 11 are

drawn at random, then probability of obtaining an eleven containing at least 3 bowlers is

- (a) 7/13 (b) 6/13 (c) 11/15 (d) 12/13

36. If $y = (1 + \tan A)(1 - \tan B)$ where $A - B = \frac{f}{4}$, then

$(y+1)^{y+1}$ is equal to

- (a) 9 (b) 4 (c) 27 (d) 81

37. The system of equations

$$r x + y + z = r - 1$$

$$x + r y + z = r - 1$$

$$x + y + r z = r - 1$$

has no solution, if r is

- (a) Not -2 (b) 1
(c) -2 (d) Either -2 or 1

38. $P = \frac{1}{2} \sin^2 \theta + \frac{1}{3} \cos^2 \theta$, then

- (a) $\frac{1}{3} \leq P \leq \frac{1}{2}$ (b) $P \geq \frac{1}{2}$
(c) $2 \leq P \leq 3$ (d) $-\frac{\sqrt{13}}{6} \leq P \leq \frac{\sqrt{13}}{6}$

39. The sum of the lengths of projections of $\hat{i} + 3\hat{j} + 2\hat{k}$, $3\hat{i} - \hat{j} - 2\hat{k}$ on the coordinate axes where $p = 2$, $q = 3$ and $r = 1$ is:

- (a) 6 (b) 5 (c) 4 (d) 3

40. $(\vec{a} + 2\vec{b} - \vec{c}) \cdot \{(\vec{a} - \vec{b}) \times (\vec{a} - \vec{b} - \vec{c})\}$ is equal to:

- (a) $[\vec{a} \ \vec{b} \ \vec{c}]$ (b) $2[\vec{a} \ \vec{b} \ \vec{c}]$
(c) $3[\vec{a} \ \vec{b} \ \vec{c}]$ (d) 0

41. Suppose A is a matrix of order 3 and $B = |A| A^{-1}$. If

$|A| = -5$, then $|B|$ is equal to

- (a) 1 (b) -5 (c) -1 (d) 25

42. In a college of 300 students, every student reads 5 newspaper and every newspaper is read by 60 students. The no. of newspaper is

- (a) At least 20 (b) At most 20
(c) Exactly 25 (d) None of these

43. Let $A = \vec{a}$, $B = \vec{b}$ and $C = \frac{1}{4}\vec{a} - \frac{1}{2}\vec{b}$, then the point

C lies:

- (a) outside ΔOAB but inside $\angle OAB$
(b) outside ΔOAB but inside $\angle OBA$

(c) outside ΔOAB but inside $\angle AOB$

(d) None of these

44. If $\sin x + \sin^2 x = 1$, then the value of $\cos^{12} x + 3 \cos^{10} x + 3 \cos^8 x + \cos^6 x + 2 \cos^4 x + \cos^2 x - 2$, is equal to:

- (a) 0 (b) 1 (c) 2 (d) $\sin^2 x$

45. If the position vectors of the vertices A, B, C are respectively $\hat{i} + \hat{j} + \hat{k}$, $4\hat{i} + \hat{j} + \hat{k}$ and $4\hat{i} + 5\hat{j} + \hat{k}$ of a ΔABC , then the position vector of its incentre is:

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

46. If $0 < x < \frac{\pi}{2}$ and $\cos x + \sin x = \frac{1}{2}$, then the value of $\tan x$ is

- (a) $\frac{2 - \sqrt{7}}{3}$ (b) $-\frac{4 + \sqrt{7}}{3}$ (c) $-\frac{1 + \sqrt{7}}{3}$ (d) $-\frac{2 + \sqrt{7}}{3}$

47. The vector component of \vec{b} perpendicular to \vec{a} is:

- (a) $(\vec{b} \cdot \vec{c})\vec{a}$ (b) $\frac{\vec{a} \times (\vec{b} \times \vec{a})}{|\vec{a}|^2}$

- (c) $\vec{a} \times (\vec{b} \times \vec{a})$ (d) none of these

48. A bag 'A' contains 2 white and 3 red balls and bag 'B' contains 4 white and 5 red balls. One ball is drawn at random from a randomly chosen bag and is found to be red. The probability that it was drawn from bag 'B' was

- (a) $\frac{5}{14}$ (b) $\frac{5}{16}$ (c) $\frac{5}{18}$ (d) $\frac{25}{52}$

49. 'A' draws two cards with replacement from a pack of 52 cards and 'B' throws a pair of dice what is the chance that 'A' gets both cards of same suit and 'B' gets total of 6

- (a) $\frac{1}{144}$ (b) $\frac{1}{4}$ (c) $\frac{5}{144}$ (d) $\frac{7}{144}$

50. The value of $\int_{-2f}^{5f} \cot^{-1}(\tan x) dx$ is:

- (a) $\frac{7f^2}{2}$ (b) $\frac{f^2}{2}$ (c) 0 (d) none

SECTION - B

51. Convert 527_8 to binary.
(a) 011100111 (b) 101010111
(c) 343 (d) 111010101
52. Dynamic memory cells store a data bit in a _____.
(a) diode (b) resistor
(c) capacitor (d) flip-flop
53. The ASCII code for the character J is :
(a) 1001 0001 (b) 1001 1010
(c) 0100 1010 (d) 1010 0001
54. The two kinds of main memory are :
(a) Primary and secondary (b) Random and sequential
(c) ROM and RAM (d) All of the above
55. A positive AND gate is also a negative
(a) NAND gate (b) NOR gate
(c) AND gate (d) OR gate
56. In which code the successive code characters differ in only one bit position ?
(a) gray code (b) excess 3 code
(c) 8421 code (d) algebraic code
57. An OR gate has 6 inputs. What is the only input word that produces a 0 output ?
(a) 000000 (b) 000111
(c) 111000 (d) 111111
58. Conversion of binary number 1010000101112 to hexadecimal number is
(a) D8F916 (b) A8B916
(c) A1716 (d) D9F816
59. A shift register can be used for :
(a) parallel to serial conversion
(b) serial to parallel conversion
(c) digital delay line
(d) all of the above
60. When use with an IC, what does the term "QUAD" indicate ?
(a) 2 circuits (b) 4 circuits
(c) 6 circuits (d) 8 circuits

SECTION - C

Directions (Q.61 and Q.62) : Read the following information to answer these questions :

Seven poles A, B, C, D, E, F and G are put in such a way that the distance between the next two decreases by 1 metre. The distance between the first two poles, A and B, is 10 metres.

61. What is the distance between the first pole A and the last pole G ?
(a) 40 m (b) 45 m (c) 49 m (d) none
62. If a monkey hops from pole G to pole C, then how much

distance did it cover ?

- (a) 19 m (b) 22 m (c) 26 m (d) none

63. The average age of 15 students of a class is 15 years. Out of these, the average age of 5 students is 14 years and that of the other 9 students is 16 years. The age of the 15th student is :

- (a) 11 years (b) 14 years (c) 15 years (d) $15\frac{2}{7}$ years

Directions (Q.64 and Q.67) : Read the following information carefully and answer the questions given below it :

(i) Eight doctors P, Q, R, S, T, U, V and W visit a charitable dispensary every day except on a holiday i.e. Monday.

(ii) Each doctor visits for one hour from Tuesday to Sunday except Saturday. The timings are 9 a.m. to 1 p.m. to 2 p.m. and 2 p.m. to 6 p.m.; 1 p.m. to 2 p.m. is lunch break.

(iii) On Saturday, it is open only in the morning i.e. 9 a.m. to 1 p.m. and each doctor visits for only half an hour.

(iv) No other doctor visits the dispensary before doctor Q and after doctor U.

(v) Doctor W comes immediately after lunch break and is followed by R.

(vi) S comes in the same order as P in the afternoon session.

64. Doctor P visits in between which of the following pairs of doctors ?
(a) S and V (b) U and W (c) R and W (d) R and U

65. At what time the visit of doctor R is over on Sunday ?
(a) 1 p.m. (b) 3 p.m. (c) 4 p.m. (d) 5 p.m.

66. At what time the visit of doctor T would be over on Saturday ?
(a) 10 a.m. (b) 11 a.m.
(c) Either 10 a.m. or 11 a.m. (d) none

67. If the lunch break and subsequent visiting hours are reduced by 15 minutes, at what time doctor U is expected to attend the dispensary ?
(a) 3.15 p.m. (b) 4 p.m. (c) 4.15 p.m. (d) 4.45 p.m.

68. Find the correct alternative

$$9 + 5 \div 4 \times 3 - 6 \equiv 12$$

- (a) + and \times (b) \div and \times (c) \div and $-$ (d) + and $-$

69. Pointing to a girl in the photograph, Amar said, "Her mother's brother is the only son of my mother's father." How is the girl's mother related to Amar ?
(a) Mother (b) Sister (c) Aunt (d) Grandmother

70. Choose the missing term

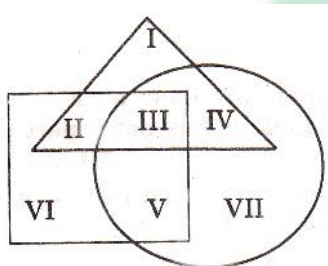
BEH, KNQ, TWZ, ?

- (a) IJL (b) CFI (c) BDF (d) ADG

71. Find the wrong term in the letter-number series given below : G4T, J10R, M20P, P43N, S90L

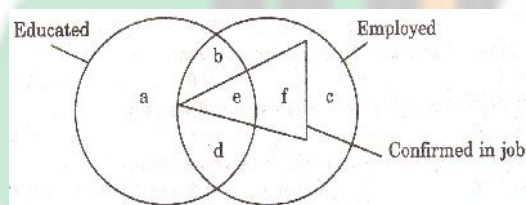
- (a) G4T (b) J10R
(c) M20P (d) P43N

72. The triangle, square and circle shown below respectively represent the urban, hard working and educated people. Which one of the areas marked I-VII is represented by the urban educated people who are not hard working ?



- (a) II (b) I (c) IV (d) III

73. Read the figure and find the region representing persons who are educated and employed but not confirmed.

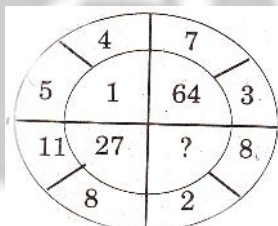


- (a) a, c (b) a, b, c (c) b, d (d) a, d, c

74. How many meaningful words can be formed using the first, the third, the sixth and the seventh letters of the word DREAMLAND using each letter only once in each word ?
(a) One (b) Two (c) Three (d) Four

Directions (Questions 75 to 76) : In each of the following questions, examine the given statements carefully and find out which two of the statements cannot be true simultaneously, but can both be false.

75. 1. All animals are carnivorous.
2. Some animals are not carnivorous.
3. Animals are not carnivorous.
4. Some animals are carnivorous.
(a) 1 and 2 (b) 2 and 3 (c) 1 and 3 (d) 3 and 4
76. 1. All children are not inquisitive.
2. Some children are inquisitive.
3. No children are inquisitive.
4. Some children are not inquisitive.
(a) 1 and 3 (b) 1 and 4 (c) 2 and 3 (d) 3 and 4



77.

- (a) 0 (b) 8 (c) 125 (d) 216

78. A is three times as old as B. C was twice as old as A four years ago. In four years time, A will be 31. What is the present age of B and C ?
(a) 9, 46 (b) 9, 50 (c) 10, 46 (d) 10, 50
79. In a queue, Shikhar is ninth from the back. Arun's place is eighth from the front. Nikhil is standing between the two. What could be the minimum number of boys standing in the queue ?
(a) 8 (b) 10 (c) 12 (d) 14
80. If $-$ means \div , $+$ means \times , \div means $+$, then which of the following equations is correct ?
(a) $52 \div 4 + 5 \times 8 - 2 = 36$ (b) $43 \times 7 \div 5 + 4 - 8 = 25$
(c) $36 \times 4 - 12 + 5 \div 3 = 420$ (d) $36 - 12 \times 6 \div 3 + 4 = 60$
81. In a certain code, SUBSTITUTION is written as ITBUSNOITUT. How is DISTRIBUTION written in that code ?
(a) IRTSIDNOITUB (b) IRTSIDNOIBUT
(c) IRTDISNOITUB (d) IRTDISNOIUTB
82. If PAINT is coded as 74128 and EXCEL is coded as 93596, then how would you encode ACCEPT ?
(a) 455978 (b) 547978
(c) 554978 (d) 735961

Direction (Q.83 to 84) : Read the following information and answer the questions given below it :

A is the father of C. But C is not his son.

E is the daughter of C. F is the spouse of A.

B is the brother of C. D is the son of B.

G is the spouse of B. H is the father of G.

83. Who is the grandmother of D ?
(a) A (b) C (c) F (d) H
84. Who is the son of F ?
(a) B (b) C (c) D (d) E

Direction (Q.85 to 87) : Read the following information carefully and answer the questions that follow :

(i) Five friends P, Q, R, S and T travelled to five different cities of Chennai, Calcutta, Delhi, Bangalore and Hyderabad by five different modes of transport of Bus, Train, Aeroplane, Car and Boat from Mumbai.

(ii) The person who travelled to Delhi did not travel by boat.

(iii) R went to Bangalore by car and Q went to Calcutta by aeroplane.

(iv) S travelled by boat whereas T travelled by train.

(v) Mumbai is not connected by bus to Delhi and Chennai.

85. Which of the following combinations is true for S ?
(a) Delhi - Bus (b) Chennai - Bus
(c) Chennai - Boat (d) None of these

86. Which of the following combination of place and mode is not correct ?
 (a) Delhi - Bus (b) Calcutta - Aeroplane
 (c) Bangalore - Car (d) Chennai - Boat

87. Who among the following travelled to Delhi ?
 (a) R (b) S (c) T (d) None

Direction (Q.88 to 90) : Study the information given below and answer the questions that follow :

There are five persons, P, Q, R, S and T. One is football player, one is chess player and one is hockey player. P and S are unmarried ladies and do not participate in any game. None of the ladies plays chess or foot ball. There is a married couple in which T is the husband. Q is the brother of R and is neither a chess player nor a hockey player.

88. Who is the football player ?
 (a) P (b) Q (c) R (d) S
89. Who is the hockey player ?
 (a) P (b) Q (c) R (d) S
90. The three ladies are :
 (a) P, Q, R (b) Q, R, S (c) P, Q, S (d) P, R, S
91. Kishenkant walks 10 kilometres towards North. From there, he walks 6 kilometres towards South. Then, he walks 3 kilometres towards East. How far and in which direction is he with reference to his starting point ?
 (a) 5 kilometres West (b) 5 kilometres North-east
 (c) 7 kilometre East (d) 7 kilometres West
92. P, Q, R and S are playing a game of carrom. P, R and S, Q are partners. S is to the right of R who is facing west. Then, Q is facing
 (a) North (b) South (c) East (d) West

Directions (Q.93 to 94) : Read the information given below to answer these questions :

- (i) Aarti is older than Sanya.
 (ii) Muskan is elder than Aarti but younger than Kashish.
 (iii) Kashish is elder than Sanya.
 (iv) Sanya is younger than Muskan.
 (v) Gargi is the eldest.

93. Who is the youngest ?
 (a) kashish (b) Aarti (c) Muskan (d) Sanya
94. Agewise, who is in the middle ?
 (a) kashish (b) Aarti (c) Muskan (d) Sanya

Directions (Q. 95 to 96) : Read the following information carefully and answer the questions that follow :

A, B, C, D, E and F are seated in a circle facing the centre. D is between F and B. A is second to the left of D and second to the right of E.

95. Who is facing A ?
 (a) B (b) D
 (c) F (d) Either F or B
96. Who among the following is facing D ?
 (a) A (b) C
 (c) E (d) Cannot be determined
97. Which letter will be the fifth from the right if the first and the second, the third and the fourth and so on are interchanged in the word 'COMANIONATE' ?
 (a) A (b) I (c) N (d) O

Directions (Q.98 to 99) : In each questions below are given two statements followed by two conclusions numbered I and II. You have to take the given two statements to be true even if they seem to be at variance from commonly known facts. Read the conclusions and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts.

Give answer

- (a) if only conclusion I follows;
 (b) if only conclusion II follows;
 (c) if either I or II follows
 (d) if neither I nor II follows and

98. **Statements :** Some bottles are pencils.
 Some pencils are glasses.

- Conclusions :** I. No glass is bottle.
 II. Some bottles are glasses.

99. **Statements :** Some fools are intelligent.
 Some intelligent are great.

- Conclusions :** I. Some fools are great.
 II. All great are intelligent.

100. A monkey climbs 30 feet at the beginning of each hour and rests for a while when he slips back 20 feet before he again starts climbing in the beginning of the next hour. If he begins his ascent at 8.00 a.m., at what time will he first touch a flag at 120 feet from the ground ?
 (a) 4 p.m. (b) 5 p.m. (c) 6 p.m. (d) none

SECTION - D

Directions (Q 101 to 110) : Fill in the blanks. That correct choice is your answers.

101. _____ he woke up, he saw that his bag was stolen.
 (a) If (b) When
 (c) Where (d) So
102. The crooks did not _____ any resistance.
 (a) show (b) put
 (c) offer (d) exert

103. The rules _____ passengers to cross the railway line.

- (a) advise (b) forbid
(c) request (d) stop

104. What he has done admits _____ no excuse.

- (a) with (b) of (c) for (d) in

105. The government is strapped _____ cash like news before

- (a) with (b) of (c) by (d) for

106. I can _____ my holiday only by a few days.

- (a) enjoy (b) take
(c) extend (d) increase

107. The thief made _____ all the money.

- (a) up (b) off with
(c) do with (d) good

108. The window of our room _____ the reas.

- (a) overlooks (b) opens
(c) opposes (d) None of these

109. He _____ to has request immediately.

- (a) accessed (b) acceded
(c) seceded (d) conceded

110. She gradually grew _____ to her life.

- (a) allayed (b) endeaud
(c) desbised (d) accus to med

Directions (Q.111 to 113) : Pick at the nearest correct meaning or synonym of the words given below :

111. OFFEND

- (a) angry (b) hate
(c) hurt (d) respect

112. BOOM

- (a) blessing (b) curse
(c) explosion (d) vigous

113. INSTANTLY

- (a) repeatedly (b) lately
(c) immediately (d) slowly

Directions (Q.14 to 16) : Choose the most suitable antonym of the given word.

114. ABOLISH

- (a) remove (b) reside
(c) confront (d) establish

115. DOMINATE

- (a) defeat (b) succumb
(c) threaten (d) sheepish

116. EVENTVALLY

- (a) primarily (b) resultantly
(c) troubledly (d) initially

Directions (Q.17 to 20) : Given below is a passage in which missing words are represented by numbered blanks. Below the passage four choices, only one of which fits the blank appropriately.

For one hundred years the 1 princes and the 2 people had been suffering the effects of the foreign rull. Their 3 came to an end when on 10 may 1857. The Indian army at meerut 4 .

117.

- (a) comfortable (b) dispossed
(c) royal (d) deadly

118.

- (a) downtrodden (b) eglifarian
(c) rightful (d) benign

119.

- (a) energy (b) silence
(c) patience (d) aptitude

120.

- (a) enveloped (b) stambeded
(c) mutinied (d) overthrew