SECTION-A (Mathematics)

1. If the system of equations $x - ky - z = 0$, $kx - y - z = 0$, $x + y - z = 0$ has a non-zero solution, then the possible values of k are

(a) $-1, 2$ (b) $1, 2$ (c) $0, 1$ (d) $-1, 1$

2. If the sum to infinity of the series,

$$1 + 4x + 7x^2 + 10x^3 + ..., \text{ is } \frac{35}{16}, \text{ where } |x| < 1, \text{ then x}$$

equals to :

(a) 19/7   (b) 1/5   (c) 1/4   (d) *none*

3. If the straight line x + 2y = 9, 3x - 5y = 5 and ax + by = 1 are concurrent, then the straight line 5x + 2y = 1 passes through the point :

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

4. The value(s) of P for which the equation $2x^2 - \sqrt{2}\, Px + P = 0$ has equal to roots is (are)

(a) 0   (b) 4   (c) 0, 4   (d) None

5. If the roots of the equation $12x^2 + mx + 5 = 0$ are in the ratio of 3 : 2, then the value(s) of m is/are

(a) $-6\sqrt{5}$ (b) $5\sqrt{5}$ (c) $\pm 5\sqrt{10}$ (d) $\pm 6\sqrt{10}$

6. The digits 4, 5, 6, 7, 8 are written in every possible order. The number of numbers greater than 56000 is

(a) 98   (b) 90   (c) 96   (d) 70

7. The number of diagonals that can be drawn by joining the vertices of an octagon is

(a) 20   (b) 8   (c) 28   (d) 16

8. If a, b, c are unequal numbers such that a, b, c are in A.P. and $b - a, c - b, a$ are in G.P., then $a : b : c$ is

(a) $1 : 2 : 3$ (b) $1 : 3 : 5$
(c) $2 : 3 : 4$ (d) $1 : 2 : 4$

9. A tangent having a slope to the ellipse $\dfrac{x^2}{18} + \dfrac{y^2}{32} = 1$ intersects the major and minor axes at A and B. If O is the origin, then the area of OAB is :

(a) 48 sq. units   (b) 9 sq. units
(c) 24 sq. units   (d) 16 sq. units

10. With common difference 5° and smallest angle 120° ; the number of sides is

(a) 7   (b) 5   (c) 9   (d) 11

11. The set of real values of   for which the equation

$$(2 +)x^2 - 2\ xy + (\ -1)y^2 - 4x - 2 = 0$$

represents a hyperbola is :

(a) $(-\infty, -2)$ (b) $\left(-\infty, -\dfrac{2}{3}\right) \cup \left(-\dfrac{2}{3}, 2\right)$

(c) $\left(-2, \dfrac{2}{3}\right) \cup \left(\dfrac{2}{3}, \infty\right)$ (d) None of these

12. The sum of all two digit numbers whcih are not divisible by 2 or 3 is :

(a) 1734   (b) 1620   (c) 1482   (d) none

13. The equation of normal to the curve $y = \displaystyle\int_0^x \sin^3 t \cdot dt$ at $x = \dfrac{\pi}{2}$ is

(a) $x - y = \dfrac{\pi}{2} - \dfrac{2}{3}$ (b) $x + y = \dfrac{\pi}{2} + \dfrac{2}{3}$

(c) $x - y = \dfrac{\pi}{6}$ (d) $x + y = \dfrac{5\pi}{6}$

14. $\displaystyle\lim_{x \to \infty} \left(\dfrac{x+2}{x-2}\right)^{x+1}$ is equal to

(a) e^2 (b) e^4 (c) e^{-2} (d) e^{-4}

15. Let $f : R \to R$ be a differentiable function and $f(1) = 4$ Then, the value of $\displaystyle\lim_{x \to 1} \int_4^{f(x)} \dfrac{2t}{x-1} \cdot dt$ is

(a) $f'(1)$ (b) $2f'(1)$ (c) $4f'(1)$ (d) $8f'(1)$

16. $\displaystyle\int \dfrac{\cos x + x \sin x}{x(x + \cos x)} dx$ is equal to

(a) $\log\left|\dfrac{x}{x + \cos x}\right| + c$ (b) $\log|x(x + \cos x)| + c$

(c) $\log\left|\dfrac{x + \cos x}{x}\right| + c$ (d) $-\log\left|\dfrac{x}{x + \cos x}\right| + c$

17. The value of $\displaystyle\int_{\pi/8}^{\pi/4} (\sin^4 \theta + \cos^4 \theta)\, d\theta$ is

(a) $\dfrac{1}{32}(2\pi + 3)$ (b) $\dfrac{1}{32}(2\pi - 3)$

(c) $\dfrac{1}{32}(3f - 2)$ (d) $\dfrac{1}{32}(3\pi + 2)$

18. Solution set of the inequality $5^{x+2} > (1/25)^{1/x}$ is :

(a) (-2, 0) (b) (-2, 2) (c) (-5, 5) (d) $(0, \infty)$

19. The area of the figure bounded by $y = \ln x$ and $y = (\ln x)^2$ is :

(a) 3 - e (b) 3 + e (c) 5 - e (d) 5 + e

20. The angle at which the curve $y = k\,e^{kx}$ intersects the y-axis is :

(a) $\tan^{-1} k^2$ (b) $\cot^{-1} k^2$ (c) $\tan^{-1} k$ (d) $\cot^{-1} k$

21. $\displaystyle\int_{2-\log 3}^{3+\log 3} \frac{\log(4+x)}{\log(4+x)+\log(9-x)}\,dx$ is equal to

(a) $\dfrac{3}{2}$ (b) $\dfrac{5}{2}$ (c) 1+2 log 3 (d) $\dfrac{1}{2}+\log 3$

22. If $y = e^{-x}\cos x$ and $y_4 + ky = 0,$ where

$y_4 = \dfrac{d^4 y}{dx^4},$ then k =

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

23. The two points on the line $x + y = 4$ that lie at a unit distance from the line $4x + 3y = 10$ are

(a) (− 3, 1); (7, 11) (b) (3, 1) ; (− 7, 11)
(c) (3, 1); (7, 11) (d) None of these

24. The number of different ways in which five 'alike dashes' and eight 'alike dots' can be arranged, using only seven of these 'dashes' and 'dots' is :
(a) *1287* (b) *119* (c) *120* (d) *1235520*

25. If f(x + 2y, x - 2y) = xy then f(x, y) is equal to :

(a) $\dfrac{1}{4}(xy)$ (b) $\dfrac{1}{4}(x^2 - y^2)$

(c) $\dfrac{1}{8}(x^2 - y^2)$ (d) $\dfrac{1}{2}(x^2 + y^2)$

26. If (2, 0) is the vertex and y-axis the directrix of a parabola, then its focus is

(a) (2, 0) (b) (− 2, 0) (c) (4, 0) (d) (− 4, 0)

27. Equation of the latus rectum of the parabola $y^2 + 4x = 0$ is

(a) x = a (b) x = − a (c) y = a (d) none

28. The integral $\displaystyle\int_{-1/2}^{1/2}\left([x]+\log\frac{1+x}{1-x}\right)dx$ equals :

(a) -1/2 (b) 0 (c) 1 (d) 2 log (1/2)

29. An anticraft gun takes four shots at an enemy plane moving away from it. The probabilities of hitting the plane by the first, second, third and fourth shot are 0.4, 0.3, 0.2 and 0.1 respectively. The probability that gun hits the plane is :
(a) 0.6976 (b) 0.866 (c) 0.922 (d) 0.934

30. Volume of parallelopiped with sides given by $\overrightarrow{OA} = 2\hat{i} - 3\hat{j} + \hat{k}$, $\overrightarrow{OB} = \hat{i} + \hat{j} - \hat{k}$, $\overrightarrow{OC} = 3\hat{i} - \hat{k}$ is
(a) 15 (b) 17 (c) 25 (d) None

31. Area of the triangle with two adjacent sides represented by $\vec{a} = 3\hat{i} + 4\hat{j}$, $\vec{b} = -5\hat{i} + 7\hat{j}$ is

(a) 3 (b) 4 (c) $20\dfrac{1}{2}$ (d) 10

32. If $\vec{a}$ and $\vec{b}$ are two vectors such that $\vec{a}.\vec{b} = 0$ and $\vec{a} \times \vec{b} = \vec{0},$ then

(a) either $\vec{a} = \vec{0}$ or $\vec{b} = \vec{0}$ (b) $\vec{a} \parallel \vec{b}$
(c) $\vec{a} \perp \vec{b}$ (d) None of these

33. If the arithmetic mean of 17, 15, 23, *x* and 19 be 20, then the value of *x* is
(a) 20 (b) 22 (c) 26 (d) 24

34. The marks, out of 50, of a group of 15 students of Class XII in a class-test are :
20, 24, 27, 38, 18, 42, 35, 21, 44, 29, 18, 31, 26, 36, 41
The median score is
(a) 8 (b) 21 (c) 29 (d) 31

35. The mean wages of 100 workers of a factory running two shifts of 60 and 40 workers is 38. If the mean wage of 60 workers in the morning shift in Rs. 40, then the mean wage of 40 workers in the evening shift is
(a) Rs. 37 (b) Rs. 36 (c) Rs. 35 (d) Rs. 40

36. Given that a throw of three unbiased dice shows different faces, the probability that one face shows 6, is

(a) $\dfrac{5}{6}$ (b) $\dfrac{5}{18}$ (c) $\dfrac{1}{2}$ (d) $\dfrac{13}{18}$

37. One of the two mutually exclusive events must occur. If the chance of one is 2/3 of the other; then odds in favour of the other are
(a) 2 : 3 (b) 1 : 3
(c) 3 : 1 (d) None of these

38. The two line segements joining (-2, 7), (-5, -3) and (-8, -13), (1, 17) cut each other at
(a) only one point (b) no point
(c) infinitely many points (d) none of these

39. In a box containing 100 bulbs, 10 are defective. What is the probability that out of a sample of 5 bulbs, none is defective ?

(a) 10^{-5} (b) $\left(\dfrac{1}{2}\right)^5$ (c) $\left(\dfrac{9}{10}\right)^5$ (d) $\dfrac{9}{10}$

40. $x^2 \cdot y^2 = (x+y)^n$, $\dfrac{dy}{dx} = \dfrac{y}{x}$ then n =

(a) 2　　(b) 3　　(c) 4　　(d) 6

41. If $f(x) = -x^3 + bx^2 - cx + d$ and $0 < b^2 < c$, then in $(-\infty, \infty)$

(a) f (x) is strictly increasing function
(b) f (x) has a local maxima
(c) f (x) is strictly decreasing function
(d) f (x) is bounded

42. The probability that a person will hit a target is given as 0.3. Then his probability of atleast one hit in 10 shots is

(a) $(0.3)^{10}$　　　　(b) 1
(c) $1 - (0.7)^{10}$　　(d) $(0.7)^{10}$

43. If $\sin \alpha + \cos \alpha = m$, then $\sin^6 \alpha + \cos^6 \alpha$ is

(a) $\dfrac{4 - 3(m^2 - 1)^2}{4}$　　(b) $\dfrac{4 + 3(m^2 - 1)^2}{4}$

(c) $\dfrac{3 + 4(m^2 - 1)^2}{4}$　　(d) None of these

44. The value of $\left(1 + \cos \dfrac{\pi}{8}\right)\left(1 + \cos \dfrac{5\pi}{8}\right)\left(1 + \cos \dfrac{7\pi}{8}\right)$

$\left(1 + \cos \dfrac{3\pi}{8}\right)$ is

(a) $\dfrac{1}{2}$　　(b) $\cos \dfrac{\pi}{8}$　　(c) $\dfrac{1}{8}$　　(d) $\dfrac{1 + \sqrt{2}}{2\sqrt{2}}$

45. In a triangle ABC, $\dfrac{a \cos A + b \cos B + c \cos C}{a + b + c} =$

(a) $\dfrac{r}{R}$　　(b) $\dfrac{R}{r}$　　(c) $\dfrac{2r}{R}$　　(d) $\dfrac{R}{2r}$

46. The value of θ satisfying the equation

$\cos \theta + \sqrt{3} \sin \theta = 2$ is

(a) $\dfrac{\pi}{3}$　　(b) $\dfrac{5\pi}{3}$　　(c) $\dfrac{2\pi}{3}$　　(d) $\dfrac{4\pi}{3}$

47. The matrix $\begin{bmatrix} \lambda & -1 & 4 \\ -3 & 0 & 1 \\ -1 & 1 & 2 \end{bmatrix}$ is invertible if

(a) $\lambda \neq -15$　(b) $\lambda \neq -17$　(c) $\lambda \neq -16$　(d) $\lambda \neq -18$

48. If, $A = \begin{bmatrix} 4 & 3 \\ 2 & 5 \end{bmatrix}$, then the matrix $A^2 - 9A + 14I^2$, equals

(a) A　　(b) $-9A$　　(c) I^2　　(d) 0

49. If a circle having the point $(-1, 1)$ as its centre touches the straight line $x + 2y + 9 = 0$, then coordinates of the point of contact are :

(a) $(-3, 3)$　　　　(b) $(-3, -3)$

(c) $(0, 0)$　　　　(d) $\left(\dfrac{7}{3}, -\dfrac{17}{3}\right)$

50. Arithmetic mean of n observation is m. If two observations 0 and m are added, then the new mean will be

(a) m　(b) $\dfrac{m}{n+1}$　(c) $\dfrac{nm}{n+1}$　(d) $\dfrac{(n+1)m}{n+2}$

SECTION-B (Computer)

51. How many fractional digits 2^{-48} will have ?

(a) 24　　(b) 47　　(c) 49　　(d) 48

52. What is the binary equivalent of the hexadecimal number B3 ?

(a) 1011 0001　　(b) 1101 0011
(c) 1011 0011　　(d) 1001 0101

53. The 1's compliments of the binary number 1101101 is

(a) 0000010　　(b) 00100010
(c) 0010011　　(d) none

54. The 10's compliment of $(715)_8$ is

(a) 63　　(b) 539　　(c) 285　　(d) 395

55. Which of the following boolean algebra statements represent Distributive law ?

(a) $(A + B) + C = A + (B + C)$
(b) $A \bullet (B + C) = (A \bullet B) + (A \bullet C)$
(c) $A \bullet (B \bullet C) = (A.B) \bullet C$　　(d) None of the above

56. Which of the following gates is known as coincidence detector ?

(a) AND gate　　(b) OR gate
(c) NOT gate　　(d) NAND gate

57. The number of two-input NAND gates required to produce the two-input OR function is

(a) 1　　(b) 2　　(c) 3　　(d) 4

58. Equivalent expression of $F = xy(x'y + xy')z$ is

(a) $x \oplus y \oplus z$　　(b) $xy + (x \oplus y) z$
(c) xyz　　　　(d) None of these

59. "A multiplexer has n inputs and single output" statement is

(a) True　(b) False　(c) Can't say　(d) None

60. CMOS is used for
(a) high component density
(b) low power consumption
(c) high speed operation
(d) None of these

SECTION-C (Analytical Ability & Reasoning)

DIRECTIONS for Q. 61 to 65 : Study the following information carefully and answer the given questions :

B, M, T, R, K, H and D are travelling in a train compartment will III-tier sleeper berth. Each of them has a different profession of Engineer, Doctor, Architect, Pharmacist, Lawer, Journalist and Pathologist. They occupied two lower berths, three middle berths and two upper berths. B, the Engineer, is not on the upper berth. The Architect is the only other person who occupies the same type of berth as that of B. M and H are not on the middle berth and their professions are Pathologist and Lawyer respectively. T is a Pharmacist. D is neither a Journalist nor an Architect. K occupies the same type of berth as that of the Doctor.

61. Who is the Architect ?
(a) D   (b) H   (c) R   (d) none

62. What is D's profession ?
(a) Pharmacist   (b) Lawyer
(c) Doctor   (d) Engineer

63. Which of the following pairs occupy the lower berth ?
(a) BT   (b) BD   (c) BK   (d) none

64. Which of the following groups occupies the middle berth?
(a) DKT   (b) HKT
(c) DKR   (d) DHT

65. Which of the following combinations of person-berth-profession is correct ?
(a) K - Upper - Lawyer   (b) D - Upper - Doctor
(c) M - Lower - Journalist   (d) R - Lower - Architect

66. A man walks north wards. After a while he turns to his right and a little further to his left. Finally, after waling a distance of one kilometer, he turns to his left again. In which direction is he moving now ?
(a) South   (b) North
(c) West   (d) East

67. In certain code TUBUJPO is written as VSDSLNQ. How is CSJOH written in that code ?
(a) EQLMJ   (b) DQLMJ
(c) EQMLJ   (d) QELMJ

DIRECTIONS for Q. 68 to 72 : Study the following information carefully and answer the questions given below :

M, K, J, T, R, D and W are seven members of a family. There are two married couples among them belonging to two different generations. Each of them has a different choice of cuisine-Chinese, Continental, Thai, Punjabi, South Indian, Gujarati and Malwani. The grandfather likes Gujarati food. None of the ladies Continental or Thai food. T is son of M, who likes Chinese food. W is J's daughter-in-law and she likes South Indian food. K is grandfather of D, who likes Punjabi food. J is mother of R, who likes Continental food.

68. How is R related to D ?
(a) Father   (b) Brother   (c) Uncle   (d) none

69. How many male members are there in the family ?
(a) 3   (b) 4
(c) 5   (d) Data inadequate

70. Which of the following groups contains one each from the three generations ?
(a) JRT   (b) JRW   (c) MRD   (d) MWT

71. Which food does T like ?
(a) Gujarati   (b) Thai   (c) Malwani   (d) none

72. Which of the following combinations represents favourite food of the two married ladies ?
(a) Malwani, South Indian   (b) South Indian, Punjabi
(c) Punjabi, Malwani   (d) Data inadequate

73. There are deer and peacocks in a zoo. By counting heads they are 80. The number of their legs is 200. How many peacocks are there ?
(a) 20   (b) 30   (c) 50   (d) 60

74. A player holds 13 cards of four suits, of which seven are black and six are red. There are twice as many diamonds as spades and twice as many hearts as diamonds. How many clubs does he hold ?
(a) 4   (b) 5   (c) 6   (d) 7

DIRECTIONS for Q. 75 to 78 : In these questions, some symbols have been used for some mathematical operations as indicated below :

x for 'greater than'; © for 'not less than'; ÷ for 'not equal to' Φ for 'equal to'; + for 'not greater than'; for 'less than'.

Using these symbols, choose the correct alternative in each of the following questions.

75. If a © b x c, it implies that

(a) a © b Φ c   (b) a   b © c
(c) a x c + b   (d) c x b x a

76. If a x b   c, it follows that

(a) c + b © a   (b) a © b + c
(c) b © a x c   (d) a Φ c   b

77. If a   b   c, it does not imply that

(a) a x c x b   (b) a   c x b
(c) c x b x a   (d) b x a   c

78. If a + b + c, it does not imply that

(a) a   b Φ c   (b) a   b   c
(c) c Φ b   a   (d) a Φ b   c

79. In a certain code language 35796 is written as 44887.

How is 46823 written in that code ?
(a) 57914   (b) 55914   (c) 55934   (d) 55714

DIRECTIONS for Q. 80 & 81 : L, M, N, P, Q and R are six members of a family. L is the father of M but M is not his son. N is sibling of M P is N's brother-in-law. Q is R's grandson. R is N's mother.

80. How many male members are there in a family ?
(a) 3   (b) 2
(c) 4   (d) Either (a) or (c) above

81. N is
(c) R's Grandchild   (d) Either (a) or (b) above

DIRECTIONS for Q. 82 to 87 : Six friends are sitting around a circular table at equal distance from each other. A is sitting two places right of B who is exactly opposite to C. C is on immediate left of D, who is exactly opposite to E. F is also sitting at the table.

82. Who is the only person sitting between B and A ?
(a) F   (b) C   (c) D   (d) E

83. A is not sitting at equal distance from
(a) E and C   (b) D and B
(c) F and D   (d) All of them above

84. B is sitting to the :
(a) Left of F (b) Right of E (c) Left of E   (d) Right of C

85. The angle subtended by F and C at the end of the table is :
(a) 60°   (b) 120°   (c) 90°   (d) 180°

86. A is brother of B. B is the son of C. D is C's father then what is A of D ?
(a) Brother   (b) Son
(c) Grandson   (d) Grandfather

87. If B says that his mother is the only daughter of A's mother, how is A related to B ?
(a) Son   (b) Grand-father
(c) Uncle   (d) Brother

88. A right-angled triangle has a hypotenuse of 13 cm and one side of 12 cm. Its area is
(a) 30   (b) 39   (c) 80   (d) 87

89. In the series given below, count the number of 9s, each of which is not immediately preceded by 5 but is immediately followed by either 2 or 3. How many such 9s are there ?

1 9 2 6 5 9 3 8 3 9 3 3 2 5 9 2 9 3 4 8 2 6 9 8
(a) One   (b) Three   (c) Five   (d) Six

90. What is the value of $\dfrac{P+Q}{P-Q}$ if $\dfrac{P}{Q} = 7$?

(a) 4/3   (b) 2/3   (c) 2/6   (d) 7/8

91. If the arithmetic mean of two numbers is 5 and geometric mean is 4, then the numbers are
(a) 4, 6   (b) 4, 7   (c) 3, 8   (d) 2, 8

**92.** In a community of 175 persons, 40 read the *Times*, 50 read the *Samachar* and 100 do not read any. How many persons read both the papers ?
(a) 10   (b) 15   (c) 20   (d) 25

93. What is the next number in the series 2, 5, 9, 14, 20 ?
(a) 25   (b) 26   (c) 27   (d) 28

Directions (Q. 94 & 95) : The following questions are based on the diagram given below :
(1) The rectangle represents govt. employees
(2) The triangle represents urban people
(3) The circle represents graduates
(4) The square represents clerks
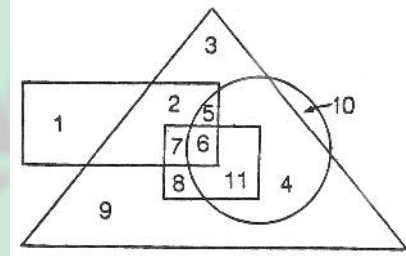
94. Which of the following statements is true ?
(a) All govt. employees are clerks
(b) Some govt. employees are graduates as well as clerks
(c) All govt. employees are graduates
(d) All clerks are govt. employees but not graduates

95. Choose the correct statement :
(a) Some clerks are govt employees
(b) No clerk is from urban areas
(c) All graduates are from urban areas
(d) All graduates are govt. employees

Direction (Q. 96 and 97) : In each questions below are two statements followed by two conclusions numbered I and II. You have to take the two given statements to be true even if they seem to be at variance from commonly known facts and decide which of the given conclusions logically follows from 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
(e) if both I and II follows

96. Statements :   1. All fans are cups.
                      2. All cups are pillows.
Conclusions : I. All fans are pillows.
                   II. All pillows are fans.

97. Statements :   1. Roma is brilliant.
                      2. Roma is a woman.
Conclusions : I. Women are brilliant.
                   II. Roma is brilliant because she is a woman.

98. The following question has a matrix with a question mark in one block, Replace the question mark by choosing the correct response from amongst the alternatives given

A2	C4	E6
G3	15	?
M5	O9	Q14

(a) L10   (b) K15
(c) K8   (d) J15

Directions (Q. 99 & 100) : Study the letter-series given below and answer the questions that follow :

H D Y S M W N B P O C R T B L Z V E G U F

99. Which two neighbours in the given arrangement are farthest in the alphabetical order ?
(a) B and Q   (b) D and Y   (c) U and F   (d) V and E

100. Which letter has the same neighbours as in the alphabetical order though they have changed places ?
(a) M   (b) N   (c) O   (d) P

SECTION - D GENERAL ENGLISH

Direction (Q. 101 to 105) : fill in the blanks with suitable words.

101. Satish was .... with a natural talent for music.
(a) given   (b) found
(c) endowed   (d) entrusted

102. She always insisted on the need to .... between ends and means.
(a) analyse   (b) define
(c) distribute   (d) distinguish

103. If greater security measures had been taken the tragedy might have been ....
(a) removed   (b) repeated
(c) restrained   (d) averted

104. The students were asked to .... the words given in the two columns.
(a) fill   (b) correspond
(c) match   (d) equal

105. We need an unsually gifted person to solve this .... problem.
(a) sensitive   (b) sensuous
(c) sensible   (d) spurious

DIRECTIONS for Q. 106 to 110 : In the following question, choose the expression which is an improvement upon the italicised part. If none of the three expressions im proves the sentence, then your answer is (d).

106. I am tired as *I am working* since 7O' clock in the morning.
(a) I was working   (b) I had been working
(c) I have been working   (d) No improvement

107. When it was dark they decided to *put at* an inn.
(a) put off with   (b) put up at
(c) put out in   (d) No improvement

108. We should be bound by a code of conduct, *isn't it* ?
(a) shouldn't we   (b) is it
(c) aren't   (d) No improvement

109. A highly improved variety of seeds *is* available to the farmer these days.
(a) are   (b) will be
(c) has been   (d) No improvement

110. The boy *told his teacher* to explain the passage.
(a) asked his teacher   (b) said to his teacher
(c) invited his teacher   (d) No improvement

DIRECTIONS for Q. 111 & 112 : *In the following question, choose the word nearest in meaning to the italicised part.*

111. Dowry is a *pernicious* social practice.
(a) traditional   (b) prevalent
(c) painful   (d) injurious

112. The people welcomed the budget as there was *judicious* allocation of funds to all the sectors.
(a) legal   (b) indiscriminate
(c) generous   (d) sensible

DIRECTIONS for Q. 113 & 114 : In the following question, choose the word or the phrase which is closest to the opposite in meaning of the italicised word or phrase.

113. They have not been eating *nourishing* food.
(a) unhygienic   (b) undercooked
(c) poor   (d) heavy

114. His was a *delicate* constitution.
(a) fit   (b) strong
(c) rugged   (d) ungainly

DIRECTIONS for Q. 115 & 116 : In these questions, choose the word from the four alternatives (a), (b), (c), and (d) which has the correct spellings.

115.
(a) ganune   (b) geiune
(c) ganuine   (d) genuine

116.
(a) disease   (b) disiase
(c) diseasa   (d) disiase

DIRECTIONS for Q. 117 to 120 : Fill in the blanks with suitable words.

117. My father keeps all his .... papers in a lock and key.
(a) required   (b) necessary
(c) useful   (d) confidential

118. The splendour of the Himalayas ....
(a) beggars description   (b) needs no description
(c) is so charming   (d) inspires awe

119. Every candidate has to poll a minimum number of votes in order to avoid .... of his security.
(a) penalty   (b) cancellation
(c) forfeiture   (d) loss

120. He stood .... as a rock and faced the challenge.
(a) quiet   (b) strong
(c) solid   (d) firm