Section - 1 (Mathematics)

1. If $\Delta_r = \begin{vmatrix} 2^{r-1} & 2(3^{r-1}) & 4(5^{r-1}) \\ x & y & z \\ 2^n-1 & 3^n-1 & 5^n-1 \end{vmatrix}$, then $\sum_{r=1}^{n} \Delta_r =$

(a) n (b) n^2 (c) n^3 (d) 0

2. Let $\Delta = \begin{vmatrix} 1+x_1y_1 & 1+x_1y_2 & 1+x_1y_3 \\ 1+x_2y_1 & 1+x_2y_2 & 1+x_2y_3 \\ 1+x_3y_1 & 1+x_3y_2 & 1+x_3y_3 \end{vmatrix}$, of Δ is :

(a) $x_1x_2x_3 + y_1y_2y_3$ (b) $x_1x_2x_3y_1y_2y_3$

(c) $x_2x_3y_2y_3 + x_3x_1y_3y_1 + x_1x_2y_1y_2$ (d) **0**

3. A bird is perched on the top of a tree 20 m high and its elevation from a point on the ground is 45°. It flies off horizontally straight away from the observer and in one second then elevation of the bird is reduced to 30°. The speed of the bird is (in m/s).

(a) 14.64 (b) 17.71 (c) 12 (d) 11

4. If $\int \cos ec2xdx = \frac{1}{2}f(g(x)) + C$, then :

(a) range g(x) = $(-\infty, \infty)$ (b) dom f(x) = $(-\infty, \infty)$ - {0}

(c) $g'(x) = \sec^2 x$ (d) all of these

5. If the area enclosed by $y^2 = 4ax$ and line y = ax is 1/3 sq. units, then the area enclosed by y = 4x with same parabola is (in sq. units)

(a) 8 (b) 4 (c) 4/3 (d) 8/3

6. The largest value of the positive integer k for which $n^k + 1$ divides $1 + n + n^2 + ... + n^{127}$ is equal to

(a) 8 (b) 16 (c) 32 (d) 64

7. If the angles A < B < C of a triangle are in A.P.,then

(a) $c^2 = a^2 + b^2 - ab$ (b) $b^2 = a^2 + c^2 - ac$

(c) $c^2 = a^2 + b^2$ (d) none

8. A dictionary is printed consisting of 7 lettered word only that can be made with a letter of the word CRICKET. If the words are printed at the words are printed at the alphabetical order, as in an ordinary dictionary, then the number of words before the word CRICKET is

(a) 530 (b) 480 (c) 531 (d) 481

9. If $\alpha, \beta, \gamma \in \left(0, \frac{\pi}{2}\right)$, then $\frac{\sin(\alpha+\beta+\gamma)}{\sin\alpha + \sin\beta + \sin\gamma}$ is

(a) < 1 (b) > 1 (c) = 1 (d) none

10. The range of values of λ for which the circles $x^2 + y^2 = 4$ and $x^2 + y^2 - 4\lambda + 9 = 0$ have two common tangents, is

(a) $\left[-\frac{13}{8}, \frac{13}{8}\right]$ (b) $\left(-\infty, -\frac{13}{8}\right) \cup \left(\frac{13}{8}, \infty\right)$

(c) $\left(1, \frac{13}{8}\right)$ (d) none

11. Let $f(x) = \int_2^x f(t^2 - 3t + 4)dt$, then

(a) $f(2) = 0$ (b) $f(-2) = 0$

(c) $f'(2) = 0$ (d) $f'(2) = 2$

12. A three-digit number is written down by random choice of the digits 1 to 9 with replacements.The probability that atleast one of the digits chosen is aperfect square is

(a) $\frac{19}{17}$ (b) $\frac{13}{25}$ (c) $\frac{96}{27}$ (d) none

13. $\lim_{x \to 0} \frac{1 - \cos 2x}{\cos 2x - \cos 8x} =$

(a) $-\frac{1}{15}$ (b) $\frac{1}{10}$ (c) $\frac{1}{15}$ (d) 15

14. The area bounded by $y = x^3, y = 8$ *and* $x = 0$ is

(a) 2 (b) 4 (c) 6 (d) 12

15. Name boys and 3 girls are to be seated in 2 vans, each having numbered seats,3 in front and 4 at back.The number of ways of seating arrangments,if the girls should sit together in a back row on adjacent seat,is

(a) 12! (b) 3.11! (c) 4.11! (d) 3! 9!

16. A matrix has x rows and x+5 columns. Matrix B has y-rows and 11-y columns.Both AB and BA exist.Then value of x+y is equal to

(a) 12 (b) 10 (c) 11 (d) none

17. The tangent to the circle $x^2 + y^2 = 5$ at (1,-2) also touches the circle $x^2 + y^2 - 8x + 6y + 20 = 0$ then the point of contact is

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

18. The value of

$\tan\frac{4\pi}{5} - \tan\frac{2\pi}{5} + \sqrt{3}\tan\frac{4\pi}{5}.\tan\frac{2\pi}{15} =$

(a) $\sqrt{3}$ (b) $\frac{1}{\sqrt{3}}$ (c) $-\sqrt{3}$ (d) $-\frac{1}{\sqrt{3}}$

19. $2\sin^{-1}x = \sin^{-1}\left(2x\sqrt{1-x^2}\right)$ is true for

(a) all x (b) x > 0

(c) $x \in [-1,1]$ (d) $|x| \le \frac{1}{\sqrt{2}}$

20. If $x^2 + px + q = 0$ *and* $x^2 + p'x + q' = 0$ have one common roots, then the common root is

(a) $\frac{p'q - q'p}{p' - p}$ (b) $\frac{q - q'}{p - p'}$

(c) $\frac{pq' - p'q}{q' - q}$ (d) $\frac{pq' - p'q}{q' - q}$

21. The smallest integer greater than $\frac{1}{\log_3 \pi} + \frac{1}{\log_4 \pi}$ is

(a) *1* (b) 2 (c) *3* (d) 4

22. In a triangle ABC, if a, b, c are in A.P,then a possible value of B is

(a) 45° (b) 75° (c) 90° (d) 120°

23. If $A^2 - 3A + 2I = 0$ then

(a) A is singular (b) $A^{-1} = \frac{3I + A}{2}$

(c) $A^{-1} = \frac{I - 3A}{2}$ (d) $A^{-1} = \frac{3I - A}{2}$

24. If (2,4) is an interior point of the circle $x^2 + y^2 - 6x - 10y + \lambda = 0$ and the circle does not cut the co-ordinate axes, then $\lambda \in$

(a) (25,34) (b) (9,32) (c) (25,32) (d) (4,25)

25. The length of the latus-rectum of the parabola

$169\left[(x-1)^2 + (y-3)^2\right] = (5x - 12y + 17)^2$

(a) 14/13 (b) 28/13 (c) 12/13 (d) 16/13

26. The sum of three numbers in G.P. is 42. If each of the extremes be multiplied by 4 and mean by 5, the products are in A.P.The least of the original numbers is

(a) 4 (b) 5 (c) 6 (d) 8

27. $\int \sin\left(2\tan^{-1}\sqrt{\frac{1-x}{1+x}}\right)dx = A\sin^{-1}x + Bx\sqrt{1-x^2}$ + C, then A + B =

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

28. Let (1, -1) be a focus and x - y = 3 be the corresponding directrix of an ellipse with eccentricity 1/2.The latus-rectum is

(a) $\frac{1}{\sqrt{2}}$ (b) $\sqrt{2}$ (c) $2\sqrt{2}$ (d) 2

29. The number of solutions of the equations

$\sec x + \operatorname{cosec} x + 2\sqrt{2}$ in $[0, 2\pi]$ is

(a) 1 (b) 2 (c) 3 (d) 4

30. A five digit number divisible by 3 is to be formed using the digit 0,1,2,3,4,5 without repetition.The number of ways this can be done is

(a) 216 (b)184 (c) 256 (d) 225

31. The letters of the word COCHIN are permuted and all the permutations are arranged in alphabetical order as in english dictionary.The number of words that appear before the word COCHIN is

(a) 360 (b)192 (c) 96 (d) 48

32. $\lim_{x\to\infty} x\left[\tan^{-1}\left(\frac{x+1}{x+2}\right) - \frac{\pi}{4}\right] =$

(a) 0 (b) -1 (c) $-\frac{1}{2}$ (d) $\frac{1}{2}$

33. $\sqrt{3}\operatorname{cosec} 20^\circ - \sec 20^\circ =$

(a) 2 (b) 4

(c) $\frac{2\sin 10^\circ}{\sin 40}$ (d) $\frac{4\sin 20^\circ}{\sin 40^\circ}$

34. The H.M. of two numbers a and b is 4.The arithmetic mean A and geometric mean G satisfy the relation $2A + G^2 = 27$. Then $a^2 + b^2 =$

(a) 45 (b) 40 (c) 36 (d) 35

35. If $\log_{105} 7 = a, \log_7 5 = b$ then $\log_{35} 105 =$

(a) ab (b) $(b+1)a$ (c) $\frac{1}{ab}$ (d) $\frac{1}{a(b+1)}$

36. If $(1+ax)^n = 1 + 8x + 24x^2 + ...$, a + n =

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

37. If $\frac{x^2}{\cos^2\theta} - \frac{y^2}{\sin^2\theta} = 1$ represents a rectangular hyperbola,then the value of θ will be

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

38. If $y = 2\cos 2\theta(1 - \cos 2\theta)$ & $x = 3\sin 2\theta(1 + \cos 2\theta)$,

(a) $\frac{3}{2}\cot\theta$ (b) $\frac{2}{3}\cot\theta$ (c) $\frac{2}{3}\tan\theta$ (d) $\frac{3}{2}\tan\theta$

39. $\int \frac{dx}{(2x - 7)\sqrt{x^2 - 7x + 12}} =$

(a) $2\sec^{-1}(2x-7)+C$ (b) $\sec^{-1}(2x-7)+C$

(c) $\frac{1}{2}\sec^{-1}(2x-7)+C$ (d) None

40. If $I_1=\int_0^{3\pi} f(\cos^2 x)dx$ and $I_2=\int_0^{\pi} f(\cos^2 x)dx$, then

(a) $I_1=5I_2$ (b) $I_1=I_2$ (c) $I_1=3I_2$ (d) $3I_1=I_2$

41. Evaluate the definite integral $\int_0^{10}\sqrt{1-\cos \pi x}\,dx$

(a) $\frac{\sqrt{2}}{\pi}$ (b) $\frac{\pi}{20\sqrt{2}}$ (c) $\frac{20\sqrt{2}}{\pi}$ (d) 1

42. The least value of $\frac{x+2}{2x^2+3x+6}$ is

(a) -1 (b) $-\frac{1}{3}$ (c) $-\frac{1}{13}$ (d) $\frac{1}{3}$

43. A man 1.75m tall walks away from a lamp post, 7.0 m high,at the rate of 6km/hr.Then his shadow is lengthening at the rate of

(a) 4km/h (b) 3km/hr (c) 2km/hr (d) 1.5km/hr

44. If $f(x)=\int_1^x t(t-3)(2t-3)^2dt$, then the function $f(x)$ will be minimum at

(a) x=0 (b) x=3 (c) x=3/2 (d) none

45. If $e^{xy}+4xy=4$, then $\frac{dy}{dx}=$

(a) x/y (b) y/x (c) $-\frac{x}{y}$ (d) $-\frac{y}{x}$

46. If $n\in N$, then $3^{3n}-26n-1$ is divisible by

(a) 575 (b) 576 (c) 675 (d) 676

47. $\lim_{x\to 0}\frac{e^{x^2}-\cos x}{x^2}=$

(a) 3/2 (b) 1/2 (c) 2/3 (d) none

48. If $3A=\begin{vmatrix}1 & 2 & 2\\ 2 & 1 & -2\\ x & 2 & y\end{vmatrix}$ and $A^T A=AA^T=1$.Then

x y =

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

49. If x = cos t, y = log t then the value of $\frac{d^2y}{dx^2}+\left(\frac{dy}{dx}\right)^2$ at $t=\frac{\pi}{2}$ is

(a) 1/2 (b) 0 (c) 1 (d) none

50. If $f(x)=x^a\log x$ and $f(0)=0$, then the value of α for which Rolle's theorem can be applied in (a,1] is

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

Section - 2 (Computer)

51. The following is used to connect component in a computer system

(a) van (b) car (c) bus (d) none

52. Maximum number of unique characters that can be represented using ASCII format is

(a)127 (b)128 (c) 255 (d) 256

53. Pick the odd one out:

(a) COBOL (b) dBase (c) ORACLE (d) MS-Access

54. Which of the following is a multiuser operating system?

(a) PC-DOS (b) MS-DOS (c) LINUX (d) none

55. Printer is a

(a) input device (b) cach memory

(c) both input and output device (d) OR gate

56. In the floating point number 0.1×10^{-12}, 0.1 is

(a) mantissa (b) exponent (c) base (d) none

57. 2's complement of 0100 is

(a) 1011 (b) 1100 (c) 0101 (d) none

58. If you convert the decimal number 32 into binary number,how many 1s are there in the binary number?

(a) 2 (b) 5 (c) zero (d) 1

59. The binary equivalent of $(A)_{16}$ is

(a) 1010 (b) 1011 (c) 110 (d) none

60. The binary equivalent of $(1A)_{16}$ is

(a) 31 (b) 26 (c) 32 (d) none

Section-3 (Analytical Ability & Logical Reasoning)

61. If I stand on my head with my face pointing southwards in what direction will my right hand point?

(a) East (b) West (c) North (d) South

62. Find out the missing numbers in the series below:

3, 6,12, 6,12, ?, 12, 24, 48

(a) 24 (b) 36 (c) 32 (d) 39

63. Today Radha is five times as old as her daughter.Four years hence the sum of their ages will be 44 years.How old is Radha's daughter now?

(a) 4years (b)10years (c) 6 years (d)16years

64. The average age of 24 boys in a class is 16.If the teacher

is included in the group and one boy is executed from the group, the average increases by 1.What is the age of the teacher?
(a) 41 (b) 45 (c) 32 (d) none

65. Which of the following will come in place of the question mark (?) in the series below?
ZGL XHN VIQ TJU ?
(a) QKZ (b) RKY (c) RLZ (d) RKZ

66. If second Saturday and all Sunday's are holidays in a 30 day month beginning on Saturday, how many working days will be there in a month?
(a) 22 (b) 20 (c) 24 (d) 21

67. In a city 60% read news paper A. 40% read news paper B and 30% read C 20% read A and B, 30% read A and C, 10% read B and C. Also 15% read paper A, B and C. The percentage of people who do not read any of these news papers is:
(a) 65% (b) 15% (c) 45% (d) none

68. As oxygen is related to burn, carbon dioxide is related to
(a) isolate (b) foam (c) extinguish (d) explode

69. If MADRAS can be written as ARSARS, how can ARKONAM be written in that code?
(a) ROAAKNM (b) ROAKANM
(c) ROAKNNM (d) ROAKNAM

70. Which set of numbers is similar to the set (63, 49, 35)?
(a) (72, 40, 24) (b) (72, 48, 24)
(c) (64, 40, 28) (d) (81, 63, 45)

71. If CHARCOAL is coded as 45164913 and MORALE is coded as 296137, how is the word COLLER coded?
(a) 397758 (b) 497758 (c) 483359 (d) 493376

72. Sanjay travelled from a point x straight to y at a distance of 80 meters. He turned right and walked 50 meters, then again turned right and walked 70 meters. Finally, he turned right and walked 50 meters. How far is he from the starting point?
(a) 10 meters(b) 20 meters (c) 50 meters (d) 70 meters

73. Dave can deliver four newspapers every minute. At this rate, how many newspapers can he deliver in 2 hours?
(a) 80 (b) 160 (c) 400 (d) 480

74. If EPH means DOG, then DBU means CAT. If QLMU means SNOW, then JGQR means _____
(a) LION (b) KING (c) BEST (d) LIST

75. A software engineer has the capability of thinking 100 lines of code in 5 minutes and can type 100 lines of code in 10 minutes. He takes a break for 5 minutes after every 10 minutes. How many lines of codes will he complete typing after an hour?
(a) 250 (b) 253 (c) 248 (d) 255

76. A two digit number is 4 times to its sum of digits, when 9 is added to the number, the digits will get reversed. Then what is that number?
(a) 10 (b) 11 (c) 14 (d) 12

77. A girl was born on September 6, 1970, which happened to be a Sunday. Her birthday has again fall on Sunday in
(a) 1975 (b) 1976 (c) 1977 (d) 1981

78. There are 19 hockey players in a club. On a particular day 14 were wearing the hockey shirts prescribed, while 11 were wearing the prescribed hockey pants. None of them was without either hockey pants or hockey shirts. How many were in complete hockey uniform?
(a) 8 (b) 6 (c) 9 (d) 7

Directions (Q 79 to 82) : These four questions are to be answered on the basis of the following information's.

A five members research group is to be chosen from the mathematicians A, B, C and D, and the physicists E, F, G and H. At least 3 mathematicians must be in the group. However.
A refuses to work with D.
B refuses to work with E.
F refuses to work with G.
D refuses to work with F.

79. If B is chosen, who else would have to be in the group?
(a) F (b) G (c) A (d) C

80. If B and C are Chosen, which of the following is definitely true?

P : A is chosen, Q : D is chosen, R : Either F or G is chosen
(a) P only (b) Q only (c) R only (d) Q and R only

81. If G is rejected, which other member could not work with the group?
(a) A (b) B (c) D (d) F

82. If H is chosen, which of the following must be true?

P : A must be chosen

Q: B must be chosen

R : G must be chosen
(a) P only (b) Q only (c) R only (d) P, Q and R

83. Bhanu spends 30% of his income on petrol on scooter. 1/4 of the remaining on house rent and the balance on food. If he spends Rs. 300 on petrol then what is the expenditure on house rent?
(a) Rs. 525 (b) Rs. 1000 (c) Rs. 675 (d) Rs. 175

84. The value of $\frac{3}{4}+\frac{5}{36}+\frac{7}{144}+...+\frac{17}{5184}+\frac{19}{8100}$ is
(a) 0.90 (b) 0.98 (c) 0.95 (d) none

85. A sporting goods store ordered an equal number of white and yellow balls. The tennis ball company delivered 45 extra white balls, making the ratio of white balls to yellow balls 1/5 : 1/6. How many white tennis balls did the store originally order for?
(a) 450 (b) 270 (c) 225 (d) none

86. A student's grade in a course is determined by 6 quizzes and one examination. If the examination counts thrice as

much as each of the quizzes, what fraction of final grade is determined by the examination?
(a) 1/6 (b) 1/5 (c) 1/3 (d) 1/4

87. A sum of money is divided among A, B and C such that for each rupee A and B gets 65 paise and C gets 35 paise. If C's share is Rs. 560, the sum is...
(a) 2400 (b) 2800 (c) 1600 (d) 3800

88. Joe's father will be twice his age 6 years from now. His mother was twice his age 2 years before. If Joe will be 24 two years from now, what is the difference between his father's and mother's age?
(a) 4 (b) 6 (c) 8 (d) 10

89. A traveler walks a certain distance. Had he gone half a kilometer an hour faster, he would have walked it in 4/5 of the time, and had he gone half a kilometer an hour slower, he would have walked $2\frac{1}{2}$ hr longer. What is the distance?
(a) 10 km (b) 15 km
(c) 20 km (d) Data Insufficient

90. 2 oranges, 3 bananas and 4 apples cost Rs. 15/- 3 oranges. 2 bananas and 1 apple cost Rs. 10. 1 bought 3 oranges, 3 bananas and 3 apples. How much did I pay?
(a) 10 (b) 8
(c) 15 (d) cannot be determined

91. A report consists of 20 sheets each of 55 lines and each such line consists of 65 characters. This report is retyped into sheets each of 65 lines such that each line consists of 70 characters. The % reduction in the number of sheets is closest to
(a) 20 (b) 5 (c) 30 (d) 35

92. The length of a rectangle is increased by 60%. By what % would the width have to be decreased to maintain the same area?
(a) 30% (b) 60% (c) 75% (d) 37.5%

93. If the numerator of a fraction is increased by 25% and denominator decreased by 20%, the new value is 5/4. What is the original value?
(a) 3/5 (b) 4/5 (c) 7/8 (d) 3/7

94. If the cost of 1/4 th of kg is Rs. 0.60, then what is the cost of 200 gm.
(a) 42 paisa (b) 48 paisa (c) 40 paisa (d) 50 paisa

Directions (Q 95 to 98) : Read the following passage to answer.

Four rooms are numberd as 1, 2, 3 & 4 and have different colors as yellow, blue, green and pink. These rooms are shared by Anshu, Dushmanta, Gaurang, Krishna, Jahnavi, Shankutala, Sharmistha and Sandhya. Each room is shared by two and the following facts are found to be true.
(a) Odd number rooms are neither green nor pink in color.
(b) Rooms of Krishna and Dushmanta have even numbers.
(c) Shankutala and Sharmistha have rooms with colors yellow and blue respectively and their room numbers are in increasing order.
(d) Room numbers of Anshu and Gaurang are in decreasing order.
(e) Dushmanta shares pink color room with Jahnavi.
(f) No other's room number is larger than that of Krishna.

95. Sandhya's room mate, room number and the color of the room are
(a) Gaurang, 2, green (b) Krishna, 4, green
(c) Jahnavi, 3, pink (d) Anshu, 3, blue

96. Find Gaurang's room mate, room number and its color.
(a) Shankuntala, 1, yellow (b) Sharmistha, 3, blue
(c) Sandhya, 4, green (d) Krishna, 4, pink

97. Find room mates, room color for the room number 2
(a) Gaurang, Shankuntala, blue
(b) Anshu, Dushmanta, green
(c) Jahnavi, Dushmanta, pink
(d) Krishna, Sandhya, pink

98. Find the room mates and room number for the blue color room.
(a) Gaurang, Shankutala, 3 (b) Anshu, Shankutala, 3
(c) Krishna, Sandhya, 4 (d) Dushmanta, Krishna, 4

99. Considering the following statements to be true.
(1) Some computers are cell phones
(b) All cell phones are radios.
Choose the one from the following conclusions that logically follows from the statement.
(i) all radios are cell phones
(ii) all computers are radioes
(iii) some computers which are not cell phones are radioes
(ii) some radioes are computers.
(a) All follow (b) only (iv) follows
(c) only (iii) and (iv) follow (d) only (iii) and (ii) follow

100. At the end of a board meeting the ten board members shook hands with each other once. How many hand shakes were there altogether?
(a) 55 (b) 90 (c) 45 (d)81

SECTION - 4 ENGLISH

Directions (Q 101 to 105) : In these questions, sentences are given with blanks to be filled in with an appropriate word(s). Four alternatives are suggest for each question. Choose the correct alternative out of the four.

101. There were two small rooms in the beach house, _____ served as a kitchen.
(a) the smaller of which (b) the smallest of which
(c) the smaller of them (d) smallest of that

102. Madhu has not been able to recall where _____
(a) show (b) put (c) offer (d) exert

103. You _____ mad if you think I'm going to show my answer-

sheet.
(a) are supposed to be (b) must be
(c) will be (d) ought to be

104. If I hadn't come along at that moment, Rahim _____ the one arrested instead of the real thief.
(a) might been (b) may have been
(c) can have been (d) could have been

105. Wheat is not native to India and barley _____
(a) Isn't either (b) Is either
(c) Is neither (d) Isn't neither

Directions (Q 106 to 110) : In the following questions, four alternatives are given for the idiom/phrase given in **bold** in the sentence. Choose the alternative which best expresses the meaning of the idom/phrase given in bold.

106. Ramesh **takes after** his father.
(a) Follows (b) imitates (c) Obeys (d)Resembles

107. They **made no bones about** acknowledging their debt to his genius
(a) Did not have any hesitation in
(b) Did not have any faith in
(c) Demanded compensation for
(d) Had problems in

108. It is evident from the minister's statement that **heads will roll** in the Secretariat.
(a) Transfers will take place (b) Heads will be cut off
(c) People will die (d) Dismissals will occur

109. During the last moments of his life, the criminal **made a clean breast of** everything he had done.
(a) Showed his breast (b) Fought like a hero
(c) Confessed without reserve (d) Faced bravely

110. She tries very hard **to keep up** with her rich neighbours.
(a) To imitate (b) To keep in touch
(c) To avoid (d) To be on par

Directions (Q.111 to 115) : In these questions, you have four brief passages with five questions following each passage. Read the passages carefully and choose the best answer to each question out of the four alternatives.

In an effort to produce the largest, fastest and most luxurious ship afloat, the British built the S.S. Titanic. It was so superior to anything else on the seas that it was dubbed 'unsinkable'. So sure of this were the owners that they provided only twenty life boats and rafts, less than one-half the number needed for the 2,227 passengers on board.

Many passengers were aboard the night it rammed an iceberg only two days at sea and more than half way between England and its New-York destination. Because the luxury liner was travelling so fast, it was impossible to avoid the ghostly looking iceberg. An unextinguished fire also contributed to the ship's submersion. Panic increased the number of casualties as people jumped into the icy water or fought to be among the few to board the life boats. Four hours after the mishap, another ship, the 'Carpathia', rescued 705 survivors.

The infamous S. S. Titanic had enjoyed only two days of sailing glory on its maiden voyage in 1912 before plunging into 12,000 feet of water near the coast of Newfoundland where it lies today.

111. All of the following are ture except that
(a) Only a third of those aboard perished
(b) The Carpathia rescued the survivors
(c) The S.S. Titanic sank near Newfoundland
(d) The S.S. Titanic was the fastest ship afloat in 1912

112. All of the following contributed to the large death toll except
(a) Panic (b) Fire (c) Speed (d)The Carpathia

113. How many days was the S.S. Titanic at sea before sinking?
(a) 2 (b) 4 (c) 6 (d) 12

114. "Maiden voyage" is closest in meaning to
(a) Inaugural (b) Most elegant (c) Longest (d) Final

115. What does this passage convey?
(a) The S.S. Titanic proved itself the most seaworthy vessel in 1912
(b) Attempts to rescue the S.S. Titanic's survivors were not successful
(c) Overconfidence by builders and owners was greatly responsible for the sinking of the vessel
(d) A fire and panic were the only causes for the sinking of the ship

Directions (Q.116 to 120) : In each of the following questions, four sentences are given. Choose the one which is grammatically correct.

116. (a) He is wiser than brave.
(b) February has less than January.
(c) He takes no less than two kilos of milk.
(d) It is the most unique piece

117. (a) The principal and Secretary are on leave.
(b) A number of students has failed in the examination.
(c) It is I who has committed this crime.
(d) Many a man runs after money.

118. (a) I was asked to stop writing.
(b) She denied to go with me.
(c) My hairs stood on end.
(d) I am reading this novel for four days.

119. (a)I forbid you not to meet him again.
(b) He is seeking for an employment.
(c) Being a wet day, we remainded indoors
(d) He is more learned but not as responsible as his father.

120. (a) I have not and shall not bear this trouble.
(b) Running down the street, the clock struck ten.
(c) He lost not only his ticket but also his luggage.
(d) I am very obliged to you.