100 Questions

1. If A= {1, 2 , 3, 4, 5, 7, 8, 9} and {2, 4, 6, 7, 9} then how many proper subset of A∩B can be created :

a)16	b) 15
b)32	d) 31

100 Questions

2. Find the area under the curve f(x) = $x2+5x+2$ with the limits 0 to 1

a) 3.833	b)4.388
c)4.833	d)3.338

100 Questions

3. If p^{th} term of an AP is q and its q^{th} term is p, then what will be the value of $(p+q)^{th}$ term?

a)0	b)1
c) p+q-1	d) 2(p+q-1)

100 Questions

4. The maxima and minima of the function y = $2x^3 - \frac{15}{2}x^2 + 36x + 10$ occurs respectively at

a)x=2 and x=3	b)x=1 and x=3
c)x=3 and x=2	d)x=3 and x=1

100 Questions

5. If Mean (X) is = 10 and mode (Z) is = 7, then find out the value of median (M)

a)	b)17
9	d)4.33

b)

3

100 Questions

6. Which one of the following is a source of primary data?

a)Government records	b)Research Articles
c)Journals	d)Questionnaire filled by enumerators

100 Questions

7. If the coefficient of variation and standard deviation are 30 and 12 respectively, then the arithmetic mean of the distribution is

a)40	b)36
c)25	d)19

100 Questions

8. _____ is based on all the observations and _____ is based on the central fifty percent of the observations

a)Mean deviation, Range	b)Mean deviation, quartile deviation
c)Range, standard deviation	d)Quartile deviation, standard deviation

100 Questions

9. The relationship between two variables x and y is given by 4x-10 y =20. If the median value of the variable x is 10 then what is median value of variable y?

a) 1.0	b)2.0
c)3.0	d)4.0

100 Questions

10. From the following data extract the index number by laspeyre's method:

P

$1Q$= 460, $1P0Q$ 0= 140, $P1Q$ 0=350, $P0Q1$= 200

a) 250	b)230
c)238.24	d)276.04

100 Questions

11. Which of the following index measures the changes month to month in the cost of a representative “basket” of from goods & services of the type which are bought by a household?
typical

a)Consumer Price Index	b)Laspeyre’s Index
c)Fisher’s Index	d)Paasche’sIndex

100 Questions

12. Fisher's Index is called an ideal index number because it satisfying

a) Factors reversal test	b) Time reversal test
c) Both factor and time reversal test	d) Circular test

100 Questions

13. If Laspeyre's Index is 119 and Paasche'sIndex is 112, then Fisher's Index number will be:

a)113.99	b)115.45
c)115.89	d)151.98

100 Questions

14. In price index, when a new commodity is required to be added, which of the following index is used?

a)Shifted price index	b)Splicing price index
c)Deflating price index	d)Value price Index

100 Questions

15. Let A = {1, 2, 3} and consider the relation R = {(1, 1), (2,2), (3,3), (1, 2), (2, 3), (1, 3), Then R is:

a)symmetric and transitive	b)reflexive but not transitive
c)reflexive but not symmetric	d)neither symmetric, nor transitive

100 Questions

16. There are 20 points in a plane area. How triangles can be formed by these points if 5 points are many collinear?

a)550	b)560
c)1130	d)1140

100 Questions

17. In a G.P. 5^{th} term is 27 and 8^{th} term is 729. Find its 11^{th} term.

a)729	b)6561
c)2187	d)19683

100 Questions

18.If y= x2then dy/dx at x=1 is equal to

(a)3,592.11	(b) 3,492.11
(c) 3,392.11	(d) None

100 Questions

19. Suresh’s sister is the wife of Ram. Ram is Rani’s brother, Ram’s father is MadhurSheetalis Ram’s grandmother. Remais sheetal’sdaughter –
in –law. Rohit is Rani’s brother’s son. Who is Rohit to Suresh?

(a)Brother-in-law (b) Son

(c)Brother (d)Nephew

100 Questions

20. Which is the left part of the table providing the description of the rows?

a)Caption	b)Box head
c)Stub	d)Body

100 Questions

21. Which one of the following is not a method of measures of dispersion?

a)9%	b)8%
c)11	d)10%

%

100 Questions

22.There are six children playing football namely A, B, C, D, E, and F, A, & E are brothers. F is sister of E. C is the only son of A's uncle. B & D are daughters of the brother of C's father. How D is related to A?

a)Uncle	b)Cousin
c)Niece	d)Sister

100 Questions

23. The suitable formula for computing the number of the class intervals is:

a)3.322 logN	b)0.322 logN
c)1+3.322 logN	d)1-3.322 logN

100 Questions

24. The equations of the two lines of regression are 4x+3y+7=0 and 3x+4y+8=0, Find the correlation coefficient between x and y?

a)-0.75	b)0.25
c)-0.92	d)1.25

100 Questions

25. If the regression equation are 2x+3y+1 = 0 and 5x + 6y + 1 = 0, then Mean of x and y respectively are

a)-1, -1	b)-1, 1
c)1, -1	d)2, 3

100 Questions

26. If b yx= 0.5, b xy= 0.46 then the value of correlation coefficient r is:

a)0.23	b)0.25
c)0.39	d)0.48

100 Questions

27. The coefficient of rank correlation between the ranking of following 6 students in two subjects Mathematics and Statistics is :

Mathematic	3	5	8	4	7	1
s Statistics	6	4	9	8	1	0

a)0.25	b)0.35
c)0.38	d)0.20

100 Questions

28. A machine worth Rs. 4,90,740 is depreciated at 15% on its opening value each year. when its value would reduce to Rs. 2,00,000

a)5 years 5 months	b)5 years 6 months
c)5 years 7 months	d)5 years 8 months

100 Questions

29. The number of ways 4 boys and 3 girls can be seated in a row so that they are alternate is:

a)12	b)288
c)144	d)256

100 Questions

30. If $n_{P\ r}$ = 3024 and $n_{C\ r}$ = 126, then find n and r

a)9, 4	b)10, 3
c)12, 4	d)11, 4

100 Questions

31. If Rs. 64 Amount to Rs. 83.20 in 2 years, what will Rs. 86 Amount to in 4 years at the same Rate percent per annum?

a)Rs. 137.60	b)Rs. 147.60
c)Rs. 145.34	d)Rs. 117.60

100 Questions

32. How many 3 digit odd numbers can be formed using the digits 5, 6, 7, 8, 9, if the digits can be repeated?

a)55	b)75
c)65	d)85

100 Questions

33. In a joint family, there are father, mother, 3 married sons and unmarried daughter. Out of the sons, two have 2 daughters each and one one has a son only. How many female members are there in the family?

a)3	b)6
c)9	d)5

100 Questions

34. When Rani saw Vinit, she recollected that "He is the brother of My grandfather'son." How is Rani related to Vinit?

a)Aunt	b)Daughter
c)Sister	d)Niece

100 Questions

35. Annanyais mother of Satyaand Shyamis the son of Bhima. Shiva is brother of Annanya. If Satyais sister of Shyam, how Bhimais related top Shiva?

a)Son	b)Cousin
c)Brother-in-law	d)Son-in-law

100 Questions

36. Sumanis daughter-in-law of Rakeshand sister-in-law of Rajesh. Ramesh is the son of Rakeshand only brother of rajesh. Find the relation of Sumanwith Ramesh.

a)Sister-in-law	b)Cousin
c)Aunt	d)Wife

100 Questions

37. Skewness of Normal Distribution is

a)Negative	b)Positive
c)zero	d)Undefined

100 Questions

38. Pearson's correlation coefficient between x and y is

a) $\frac{Cov(x,y)}{SxSy}$	b) $\frac{Cov(x,y)}{SxSy}$
c) $\frac{Cov(x,y)}{\sigma x \sigma y}$	d) None

100 Questions

39. If a Poission distribution in such that P(X=2)=P(X=3) than the variance of the distribution is

a)$\sqrt{3}$	b)3
c)6	d)9

100 Questions

40. The standard Deviation of Binomial distribution is

a)npq	b $\sqrt{np}$
c)np	) $\sqrt{q}$
	d np
	)

100 Questions

41. A farmer borrowed Rs. 3600 at the rate of 15% simple interest per Annum. At the end of 4years, he cleared this account by paying Rs. 4000 and a cow. The cost of the cow is:

a)Rs. 1000	b)Rs. 1200
c)Rs. 1550	d)Rs. 1760

100 Questions

42. How much amount is required to be invested ever year so as to accumulate Rs. 5,00,000 at the end of 12 years if interest is compounded annually at 10%? (Where A (12, 0.1) = 21.384284)

a)Rs. 23381.65	b)Rs. 24385.85
c)Rs. 26381.65	d)Rs. 28362.75

100 Questions

43. The effective annual rate of interest corresponding to a normal rate of 6% per annum payable half yearly is:

a)6.06%	b)6.07%
c)6.08%	d)6.09%

100 Questions

44. 10 years ago the earning per share (EPS) of ABC Ltd. was Rs. 5 share. Its EPS for this year is Rs. 22. Compute at what rate, EPS of the company grow annually?

a)	b)16.77%
15.97%	d)14.79%

c)18.64%

100 Questions

45. If ‘FORZEN’ is decoded as ‘OFAPSG’. Tick the right option that depicts ‘’MOLTEN’’ written in this way?

a)OFPOMN	b)OFSMPN
c)OFUMPN	d)OFUNPN

100 Questions

46. Radha moves towards South-East a distance of 7 km. then she moves towards West and travels a distance of 14 km. From here she moves towards North-West a distance of 7 km and finally she moves a distance of 4km towards east. How far is she now from the starting point?

a)3 km	b)4 km
c)10 km	d)11km

100 Questions

47. P, Q, R and S are playing a game of carom P, R, and S, Q playing a game of carom P, R and S, Q are partners. ‘S’ is to are right of ‘R’. If ‘R’ is facing west, then ‘Q’ is facing which the direction?

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

100 Questions

48. Pointing to a man in photograph, Khushisays, “This man’s son’s sister is my mother-in-law.” How is the Khushi’shusband related to the man in the photograph?

a) Grandson	b)Son
c)Son in law	d)Cousin

100 Questions

49. A machine is made of two parts A and B. The manufacturing Process of each part is such that probability of defective in part A is 0.08 and that B is 0.05. What is the probability that the assembled part will not have any defect?

a)0.93	b)0.864
4	d)0.874

c)0.85

100 Questions

50. If $P(A) = \frac{1}{3}$, $P(B) = \frac{3}{4}$ and $P(A \cup B) = \frac{1}{1}$ then $P\left(\frac{B}{A}\right)$ is:

a) $\frac{1}{6}$	b $\frac{4}{9}$
c) $\frac{1}{2}$	) $\frac{1}{8}$

1

1

2

d

)

100 Questions

51. The probability that a leap year has 53 Mondays is:

a) $\frac{1}{7}$	b $\frac{2}{3}$
c) $\frac{2}{7}$	) $\frac{3}{5}$

d

)

100 Questions

52. Rajuinvests Rs. 20,000 every year in a deposit scheme staring from today for next 12 years. Assuming that interest rate on this deposit is 7% per annum compounded annually. What will be the future value of this annuity? Given that $(1+0.07)^{12} = 2.25219159$.

a)Rs. 540,526	b)Rs. 382,813
c)Rs. 643,483	d)Rs. 357,769

100 Questions

53. Mr. A invested Rs. 10,000 every year for next for 3 years at the interest rate of 8 percent per annum compounded annually. What is future value of the annuity?

a)	b)32464
32644	d)36442

c)34264

100 Questions

54. Mr. Prakash invested money in two schemes ‘A’ and ‘B’ offering compound interest at the rate of 8% and 9% per annum respectively. If the total amount of interest accrued through these two schemes together in two years was Rs. 4818.30 and total amount invested was Rs. 27,000. What was the amount invested in scheme ‘A’?

a)Rs. 12,000	b)Rs. 12,500
c)Rs. 13,000	d)Rs. 13,500

100 Questions

55.A sum of money invested of compound interest doubles itself in four years. In how many years it becomes 32 times of itself at the rate of compound interest.

a)12 years	b)16 years
c)20 years	d)24 years

100 Questions

56. One morning a boy starts walking in a particular direction for 5 km and then takes a left turn and walks another 5 km thereafter he again takes left turn and walks another 5 km and at last he takes right turn and walks 5 km. Now he sees his shadow in front of him. What direction he did start Initially?

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

100 Questions

57. It is 3’ o clock in a watch. If the minute hand points towards the North-East then the hour hand will point towards the

a)South	b)South-west
c)North-West	d)South-East

100 Questions

58. Six persons A, B, C, D, R, and F are sitting in two rows with three persons in each row. Both rows are in front of each other. E is not at end of the any row and D is second left to the F, C is neighbour of E and the

diagonally opposite to D. If B is neighbour of F who is in front of C then who is sitting diagonally to F?

a)C	b)E
c)A	d)D

100 Questions

59. Find the odd man out: 34, 105, 424, 2123, 12756

a)12756	b)2123
c)424	d)34

100 Questions

60. The speeds of a number of bikes follow a norma model with a mean of 83km/ hrand a standard deviation of 9.4 distribution km/hr. Find the probability that a bike picked at travelling at more than 95 km/hr?

random is

a)0.158	b)0.38
7 c)0.49	d)0.278

100 Questions

61. Suppose A and B are two independent events with probabilities P(A) ≠ 0 and P(B) ≠ 0. Let A’ and B’ be their complements. Which one of the following statements is FALSE?

a) $P(A \cap B)$=P(A) P(B)	b)P(A/B) = P(A)
c)$P(A \cup B)$ = P(A)+P(B)	d)$P(A \cap B')$ =P(A’) P(B’)

100 Questions

62. The theorem of Compound Probability states that for any two events A and B.

a)P $(A \cap B)$=P(A)× P(B/A)	b)P(AUB) = P(A)×P(B/A)
c)P$(A \cap B)$=P(A)× P(B)	d)P(AUB) = P(A)+ P(B)-P $(A \cap B)$

100 Questions

63. The difference between compound interest and simple interest on an amount of Rs. 15,000 for 2 years is Rs. 96. What is the rate of interest per annum?

a)9%	b)8%
c)11%	d)10%

100 Questions

64. Rs. 5,000 is invested every month end in an account paying interest @ 12% per annum compounded monthly. What is the future value of this annuity just after making 11thpayment? (Given that (1.01)11=1.1156)

a)Rs.	b)Rs. 56,100
57,800 c)Rs.	d)Rs.
56,800	57,100

100 Questions

65. If the roots of the equation $x^2 - px + q = 0$ are in the ratio 2:3, then

a) $p^2 = 25\,q$	b) $p2 = 6q$
c) $6\,p^2 = 5q$	d) $6p^2 = 25q$

100 Questions

66. A sum of money doubles itself in 4 years at compound interest rate. In how many years this sum will certain becomes 8 times at same compound interest rate?

a)12 years	b)14 years
c)16 years	d)18 years

100 Questions

67. Sinking fund factor is the reciprocal of :

a)Present value interest factor of a single cash flow	b)Present value interest factor of an annuity
c)Future value interest factor of an annuity	d)Factor value interest factor of a single cash flow

100 Questions

68. Find the missing number in the following series? 3, 5, 5, 19, 7, 41, 9, ?, 11, 109

a)71	b)61
c)69	d)79

100 Questions

69. P, Q, R, S and T are sitting in a line facing West. P and Q sitting together. R is sitting at south end and S is sitting at North are end. T is neighbour of Q and R. Who is sitting the middle?

a)P	b)Q
c)R	d)S

100 Questions

70. A man is facing west. He turns 45 degree in the clockwise direction and then another 180 degree in the same direction and then 270 degree in the anticlockwise direction Find which direction he is facing now?

a)South-East	b)West
c)South	d)South-West

100 Questions

71. In certain code language, if TOUR is written as 1234, CLEAR is written 5678 and SPARE is written as 90847, find the code for CARE?

a)1247	b)4847
c)5247	d)5847

100 Questions

72. Mean deviation is minimum when deviation are taken from:

a)Mean	b)Median
c)Mode	d)Range

100 Questions

73. If a number is selected at random from the first 50 numbers, what will be the probability that the selected number natural is a multiple of 3 and 4 ?

a) 5/50	b)2/25
c)3/50	d)4/25

100 Questions

74. If the first quartile is 56.50 and the third quartile is 77.50, then the coefficient of quartile deviation is

a) 638.09	b)15.67
c)63.80	d)156.71

100 Questions

75. If three coins are tossed simultaneously, what is the probability of getting two heads together?

a) 1/4	b) 1/8
c) 5/8	d) 3/8

100 Questions

76. What will be the value of k, if the roots of the equation $(k-4)x^2 - 2kx + (k+5)=0$ are equal?

a)1	b)20
8	d)21

c)19

100 Questions

77. If $2x + 5 > 3x + 2$ and $2x - 3 < 4x - 5$ the ‘x’ can take which of the following value?

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

100 Questions

78. If the cost of 3 bags and 4 pens is Rs. 257 whereas the cost of 4 bags and 3 pens is Rs. 324, then the cost of one bag is:

a)8	b)24
c)3	d)75

2

100 Questions

79. If $\log_{10} 2 = y$ and $\log_{10} 3 = x$, then the value of $\log_{10} 15$ is:

a) x-y+1	b)x+y+1
c)x-y-1	d)y-x+1

100 Questions

80. $\log_3 4 \cdot \log_4 5 \cdot \log_5 6 \cdot \log_6 7 \cdot \log_7 8 \cdot \log_8 9$ equal to:

a)3	b)2
c)1	d)0

100 Questions

81. The number of subsets of the set {0, 1, 2, 3} is

a) 2	b) 4
c) 8	d) 16

100 Questions

82. Find the next number in the given sequence? 11, 17, 39, 85, ?, 281, 447

a)	b)143
133	d)163

c)153

100 Questions

83. $\int 2(x-3)^6\,dx$ is

a) $\frac{(2x-3)^6}{6}$	b $\frac{(2x-3)^6}{2}$
c) $\frac{(2x-3)^6}{12}$	) $\frac{(2x-3)^6}{3}$

d

)

100 Questions

84. If ROSE is coded as 6821, CHAIR is coded as 73456 and PREACH is coded as 961473, what will be the code for SEARCH?

a) 246173	b)214673
c)216473	d)214763

100 Questions

85. Ogive for more than type and less than type of distribution intersect at

a)Mean	b)Median
c)Mode	d)Origin

100 Questions

86. The median of the observation 42, 72, 35, 92, 67, 85, 72, 81, 51, 56 is

a) 69.5	b)72
c)64	d)61.5

100 Questions

87. If the sum of square of the values equals to Number of observation are 30 and Standard deviation is 3390. 7, what is th mean value of the above observations?

a)14	b)11
c)8	d)5

100 Questions

88. The mean of 50 observation is 36. If two observations 30 and 42 are to be excluded, then the mean of the remaining observation will be:

a)3	b)38
6	d)50

c)48

100 Questions

89. A sum of money is to be distribution among A, B, C, D in the proportion of the 5:2:4:3. If C gets Rs. 1000 more than D, what is B's share?

a) 2000	b)1500
c)2500	d)1000

100 Questions

90. By simplifying $(2ab^{3})^{4})^{6}/(4a3b)^{2} \times (a^{2}b^{2}))$, the answer will be

a) $4^{2}a^{2}b$	b) $4^{2}a^{2}b$
c) $4a^{33}b^{3}$	d) $4a^{22}b^{3}$

100 Questions

91. A group of 400 soldiers posted at border area had a provision for 31 days. After 28 days 280 soldiers from this group were called back. Find the number of days for which the remaining ration will be sufficient?

a)	b)6
3	d)10

c)

8

100 Questions

92. The solution of the following system of linear equations 2x-5y+4=0 and 2x+y-8 = 0 will be

a)(2,	b)(1, -3)
-3) c)(3,	d)(-2,
2)	2)

100 Questions

93. If $x5 + y5 = 0$ then $\frac{dy}{dx}$ is

a) $\frac{y+x4}{x+y4}$	b $\frac{y-x4}{y4-x}$
c) $\frac{x-y4}{x4-y}$	) $\frac{x+y4}{x4+y}$

d

)

100 Questions

94. If Arithmetic Mean and Geometric Mean between Two numbers are 5 and 4 respectively, then these numbers are

a)2 & 3	b)2 & 8
c)4 & 6	d)1 & 16

100 Questions

95. $\int \frac{4x\,dx}{x\,x2+1}$ is

a) $\frac{1}{2}\log\left(\frac{17}{5}\right)$	b) $2\log\left(\frac{17}{5}\right)$
c) $\frac{1}{2}\log\left(\frac{5}{17}\right)$	d) $2\log\left(\frac{5}{17}\right)$

100 Questions

96. If the variance of a random variable ‘x’ is 17, then what is variance of y = 2x + 5?

a)34	b)39
c)68	d)78

100 Questions

97. If the variance of given data is 12, and their mean value is 40, what is coefficient variation (CV)?

a) 5.66%	b)6.66%
c)7.50%	d)8.65%

100 Questions

98. In a given set if all data are of same value then variance would be:

a)0	**b)**1
c)−1	d)0.5

100 Questions

99. If Arithmetic mean between two numbers is 5 and Geometric mean is 4 then what is the value of Harmonic mean?

a)	b)3.4
3.2	d)3.6

c)3.5

100 Questions

100. The average age of 15 students in a class is 9 years. Out of them, the average age of 5 students is 13 years and that of 8 students is 5 years. What is the average of remaining 2 students?

a)5 years	b)9 years
c)10 years	d)15 years