

Exercise

- Frequency polygon can be drawn after drawing
 - ogive
 - bar chart
 - histogram
 - None of these
- An ogive is used to determine
 - mean
 - median
 - GM
 - HM
- The mid-value of a class interval is 42. If the class size is 10, then the upper and lower limits of the class are
 - 37.5 and 47.5
 - 47 and 37
 - 37 and 47
 - 47.5 and 37.5
- The actual lower class limits of the following classes 10-19, 20-29, 30-39 and 40-49 are
 - 9.5, 19, 29 and 39.5
 - 10, 20, 30 and 40
 - 9.5, 19.5, 29.5 and 39.5
 - 18.5, 28.5, 38.5 and 48.5
- State which of the following variable are discrete?
 - Number of children in a family.
 - Wages of workers.
 - The ages of students.
 - Weights of a set of a students.

Select the correct answer using the codes given below

 - I and II
 - I, II and III
 - All of these
 - None of these
- If the mean of five observations $x, x+2, x+4, x+6$ and $x+8$ is 11, then the mean of first three observations is
 - 9
 - 11
 - 13
 - None of these
- The combined mean of three groups is 12 and the combined mean of first two groups is 3. If the first, second and third groups have 2, 3 and 5 items respectively, then mean of third group is
 - 10
 - 21
 - 12
 - 18
- 10 is the mean of a set of 7 observations and 5 is the mean of a set of 3 observations. The mean of the combined set is given by
 - 15
 - 10
 - 8.5
 - 7.5
- In a class of 50 students, 10 have failed and their average marks are 28. The total marks obtained by the entire class are 2800. The average marks of those who have passed are
 - 43
 - 53
 - 63
 - 70

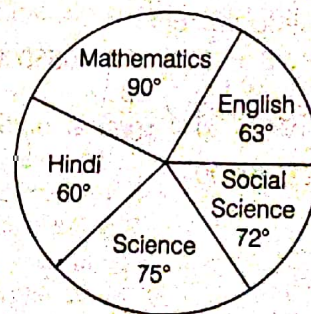
- Which of the following statements about median is true?
 - It is not affected by extreme values
 - It can be found even, if some items are not known quantitatively
 - It is useful when the data cannot be measured quantitatively
 - All of the above
- The middle item of the series arranged ascending or descending order is called
 - mean
 - median
 - mode
 - standard deviation

Directions (Q. Nos. 12-13) The itemwise expenditure of a Non-government Organisation for the year 2008-2009 is given below :

Item	Expenditure (in ₹ lakh)
Salary of employees	6
Social welfare activities	7
Office contingency	3
Vehicle maintenance	4
Rent and hire charges	2.5
Miscellaneous expenses	1.5

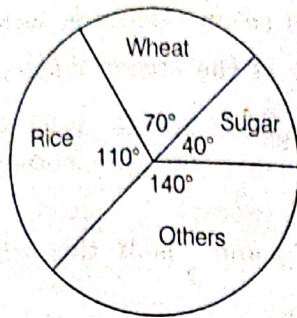
The above data are represented by a pie diagram.

- The following pie chart shows the marks obtained by a student in an examination whose scored 540 marks in all. The subject in which the student scored 108 marks is



- Science
 - Hindi
 - English
 - Social Science
- A distribution consists of three components with frequencies 45, 40 and 15 having their means 2, 2.5 and 2 respectively. The mean of the combined distribution is
 - 2.1
 - 2.2
 - 2.3
 - 2.4

Directions (Q. Nos. 14-16) Study the following pie diagram and answer the questions.



14. The percentage of wheat production is
(a) 35% (b) 70%
(c) 19.44% (d) 20%
15. If the sugar production is 9000 kg, then the wheat production is
(a) 20000 kg (b) 24000 kg
(c) 15750 kg (d) None of these
16. If the total production is 180000 kg, the difference in sugar and wheat production is
(a) 10000 (b) 15000
(c) 20000 (d) None of these
17. If the values $1, \frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{1}{5}, \dots, \frac{1}{n}$ occur at frequencies 1, 2, 3, 4, 5, 6, ..., n respectively, in a frequency distribution, then the mean is
(a) 1 (b) n
(c) $\frac{1}{n}$ (d) $\frac{2}{n+1}$
18. If the geometric mean of three observations 40, 50 and x is 10, then the value of x is
(a) $\frac{1}{2}$ (b) 4
(c) 6 (d) 2
19. Suppose, X is some statistical variable with mean μ . Let x_1, x_2, \dots, x_n be its deviations from mean with the respective frequencies f_1, f_2, \dots, f_n . What is the value of the sum $x_1 f_1 + x_2 f_2 + \dots + x_n f_n$?
(a) 0 (b) 1
(c) μ (d) $\mu + 1$
20. Which one of the following statements is not correct with reference to a histogram?
(a) Frequency curve is obtained by joining the mid-points of the top of the adjacent rectangles with smooth curves
(b) Histogram is drawn for continuous data
(c) The height of the bar is proportional to the frequency of that class
(d) Mode of the distribution can be obtained from the histogram

21.

X	0	1	2	3	4
Frequency	4	f	9	g	4

The table above gives the frequency distribution of a discrete variable X with two missing frequencies. If the total frequency is 25 and the arithmetic mean of X is 2, then what is the value of the missing frequency f ?

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

22. The yield of paddy per plot of one acre were obtained from a number of plots from two different districts in a State and are summarized in the following table.

Yield of paddy per plot in quintals	District A number of plots	District B number of plots
38.0-41.0	25	14
41.0-44.0	36	29
44.0-47.0	59	35
47.0-50.0	30	54
50.0-53.0	25	41

Which one of the following statements is correct?

- (a) The mode for district A is higher than the mode for district B
(b) The mode for district B is higher than the mode for district A
(c) Both the distributions are symmetric
(d) Both the distributions have the same mean
23. Average score of 50 students in a class is 44. Later on it was found that the score 23 was incorrectly recorded as 73. The correct average score is
(a) 42 (b) 43 (c) 45 (d) 46
24. Mode is approximately given by
(a) 2 median - 3 mean
(b) 3 median - 2 mean
(c) 2 median + 3 mean
(d) 3 median + 2 mean
25. In the "less than" type of ogive the cumulative frequency is plotted against
(a) the lower limit of the concerned class interval
(b) the upper limit of the concerned class interval
(c) the mid value of the concerned class interval
(d) any value of the concerned class interval
26. A, B and C are three sets of values of x
A : 2, 3, 7, 1, 3, 2, 3
B : 7, 5, 9, 12, 5, 3, 8
C : 4, 4, 11, 7, 2, 3, 4

Select the correct statement from among the following.

- (a) Mean of A is equal to mode of C
- (b) Mean of C is equal to median of B
- (c) Median of B is equal to mode of A
- (d) Median, mean and mode of A are same

27. A student obtains 75%, 80% and 85% marks in three subjects. If the marks of any other subject are added, then their average cannot be less than

- (a) 60% (b) 65% (c) 70% (d) 80%

28. If the mean and median of a set of numbers are 8.9 and 9 respectively, then the mode will be

- (a) 7.2 (b) 8.2 (c) 9.2 (d) 10.2

29. If every number of a finite set is increased by any number k , then the measure of central tendency should also increase by k . Which one of the following measures of central tendency does not have this property?

- (a) Arithmetic mean
- (b) Median
- (c) Mid-range i.e. the arithmetic mean of the largest and the smallest numbers
- (d) Geometric mean

30. If the median of the distribution (arranged in ascending order) 1, 3, 5, 7, 9, x , 15, 17 is 8, what is the value of x ?

- (a) 11 (b) 13
- (c) $9 < x < 15$ (d) $9 \leq x \leq 15$

31. If the width of each of the ten classes in a frequency distribution is 2.5 and the lower class boundary of the lowest class is 5.1, then the upper class boundary of the highest class is

- (a) 30.1 (b) 30 (c) 31.1 (d) 27.56

32. If the sizes in a frequency distribution are given in an ascending order of magnitude, then the median M is given by

- (a) $M = l + \frac{(N/2 + C) \times i}{f}$
- (b) $M = l + \frac{(N/2 - C) \times i}{f}$
- (c) $M = l - \frac{(N/2 - C) \times i}{f}$
- (d) $M = l - \frac{(N/2 + C) \times i}{f}$

33. The average value of the median of 2, 8, 3, 7, 4, 6, 7 and the mode of 2, 9, 3, 4, 9, 6, 9 is

- (a) 9 (b) 8 (c) 7.5 (d) 6

34. When 10 is subtracted from each of the given observations, the mean is reduced to 60%. If 5 is added to all the given observations, the mean will be

- (a) 25 (b) 30
- (c) 60 (d) 65

35. A data has highest value 120 and the lowest value 71. A frequency distribution in descending order with seven classes is to be constructed.

The limits of the second class interval shall be

- (a) 77 and 78
- (b) 78 and 85
- (c) 85 and 113
- (d) 113 and 120

36. If mean of y and $\frac{1}{y}$ is M , then what is the mean of

y^3 and $\frac{1}{y^3}$?

- (a) $\frac{M(M^2 - 3)}{3}$ (b) M^3
- (c) $M^3 - 3$ (d) $M(4M^2 - 3)$

37. For the following frequency distribution

Class interval	0-5	5-10	10-15	15-20	20-25	25-30
Frequency	10	15	30	80	40	20

If m is the value of mode, then which one of the following is correct?

- (a) $5 < m < 10$ (b) $10 < m < 15$
- (c) $15 < m < 20$ (d) $20 < m < 25$

38. The cumulative frequency curve of a frequency distribution with 6 classes and total frequency 60 is a straight line. Consider the following statements:

- I. The first and the last classes have a frequency of 10 each.
- II. Both the middle classes have a total frequency of 30.
- III. The frequency distribution does not have a mode.

Which of the statements given above are correct?

- (a) I and II (b) I and III
- (c) II and III (d) I, II and III

39. Square diagrams are drawn to represent the following data

Country	Pakistan	India	Myanmar	China
Labour Production (in ₹)	36	81	25	100

Using the scale $1 \text{ cm}^2 = ₹ 25$ what is the length of the representative square for India?

- (a) 1.8 cm (b) 1.2 cm
- (c) 1 cm (d) 2 cm

40. Assertion (A) The mean of first seven prime numbers is greater than their median.

Reason (R) Mean is always greater than median.

- (a) A and R are correct and R is correct explanation of A
 (b) A and R are correct, but R is not correct explanation of A
 (c) A is true, but R is false
 (d) A is false, but R is true

Directions (Q. Nos. 41-45) Consider the following frequency distribution.

Class	Frequency
0-10	4
10-20	5
20-30	7
30-40	10
40-50	12
50-60	8
60-70	4

41. What is the mean of the distribution?
 (a) 37.2 (b) 38.1 (c) 39.2 (d) 40.1
42. What is the median class?
 (a) 20-30 (b) 30-40 (c) 40-50 (d) 50-60
43. What is the median of the distribution?
 (a) 37 (b) 38 (c) 39 (d) 40
44. What is the mode of the distribution?
 (a) 38.33 (b) 40.66 (c) 42.66 (d) 43.33
45. There are five parties A, B, C, D and E in an election. Out of total 100000 votes cast, 36000 were cast to party A, 24000 to party B, 18000 to party C, 7000 to party D and rest to party E. What angle will be allocated for party E in the pie chart?
 (a) 15° (b) 54° (c) 60° (d) 72°

Previous Years' Questions

46. Ten observations 6, 14, 15, 17, $x+1$, $2x-13$, 30, 32, 34 and 43 are written in ascending order. The median of the data is 24. What is the value of x ?
 2014 II
 (a) 15 (b) 18 (c) 20 (d) 24
47. The class which has maximum frequency is known as
 2014 II
 (a) median class (b) mean class
 (c) modal class (d) None of these
48. Consider the following statements related to cumulative frequency polygon of a frequency distribution, the frequencies being cumulated from the lower end of the range
 I. The cumulative frequency polygon gives an equivalent representation of frequency distribution table.

- II. The cumulative frequency polygon is a closed polygon with one horizontal and one vertical side. The other sides have non-negative slope.

Which of the statement(s) given above is/are correct?
 2014 II

- (a) Only I (b) Only II
 (c) Both I and II (d) Neither I nor II
49. Consider the following data:
 I. Number of complaints lodged due to road accidents in a state within a year for 5 consecutive years.
 II. Budgetary allocation of the total available funds to the various items of expenditure.
- Which of the above data is/are suitable for representation of a pie diagram?
 2014 II
- (a) Only I (b) Only II
 (c) Both I and II (d) Neither I nor II
50. When we take class intervals on the X-axis and corresponding frequencies on the Y-axis and draw rectangles with the areas proportional to the frequencies of the respective class intervals, the graph so obtained is called
 (a) bar diagram
 (b) frequency curve
 (c) ogive
 (d) None of the above
51. If x_i 's are the mid-points of the class intervals of grouped data, f_i 's are the corresponding frequencies and \bar{x} is the mean, then what is $\sum f_i(x_i - \bar{x})$ equal to?
 (a) 0 (b) -1 (c) 1 (d) 2

52. Consider the following statements in respect of a discrete set of numbers.

- I. The arithmetic mean uses all the data is always uniquely defined.
 II. The median uses only one or two numbers from the data and may not be unique.

Which of the statement(s) given above is/are correct?
 2014 II

- (a) Only I (b) Only II
 (c) Both I and II (d) Neither I nor II
53. The geometric mean of $(x_1, x_2, x_3, \dots, x_n)$ is x and the geometric mean of $(y_1, y_2, y_3, \dots, y_n)$ is y .

Which of the following statement is/are correct?

- I. The geometric mean of

$$(x_1 y_1, x_2 y_2, x_3 y_3, \dots, x_n y_n) \text{ is } XY.$$

- II. The geometric mean of $\left(\frac{x_1}{y_1}, \frac{x_2}{y_2}, \frac{x_3}{y_3}, \dots, \frac{x_n}{y_n}\right)$ is $\frac{X}{Y}$.

Select the correct answer using the codes given below

- (a) Only I (b) Only II
 (c) Both I and II (d) Neither I nor II

54. The following table gives 'less than' type frequency distribution of income per day.

Income (in ₹) less than	Number of persons
1500	100
1250	80
1000	70
750	55
500	32
250	12

What is the modal class?

2014 II

- (a) 250-500 (b) 500-750
(c) 750-1000 (d) None of these

55. Which of the following items of information is a good example of statistical data? 2014 II

- (a) A table of logarithms of numbers
(b) A list of names of 120 students of a class
(c) A list of annual incomes of the members of a club
(d) Holiday list of the offices of Government of India in the year 2013

56. Consider the following in respect of variate which takes values 2, 2, 2, 2, 7, 7, 7 and 7.

- I. The median is equal to mean.
II. The mode is both 2 and 7.

Which of the statement(s) given above is/are correct? 2014 II

- (a) Only I (b) Only II
(c) Both I and II (d) Neither I nor II

57. Consider the following statements pertaining to a frequency polygon of a frequency distribution of a continuous variable having seven class intervals of equal width.

- I. The original frequency distribution can be reconstructed from the frequency polygon.
II. The frequency polygon touches the X-axis in its extreme right and extreme left.

Which of the statement(s) given above is/are correct?

- (a) Only I (b) Only II
(c) Both I and II (d) Neither I nor II

58. The mean of the following distribution is 18.

Class Interval	Frequency
11-13	3
13-15	6
15-17	9
17-19	13
19-21	f
21-23	5
23-25	4

What is the value of f ?

2014 II

- (a) 8 (b) 9 (c) 10 (d) 11

59. The average of u, v, w, x, y and z is 10. What is the average of $u + 10, v + 20, w + 30, x + 40, y + 50$ and $z + 60$? 2013 II

- (a) 30 (b) 35 (c) 40 (d) 45

60. If m is the mean of p, q, r, s, t, u and v , then what is $(p - m) + (q - m) + (r - m) + (s - m) + (t - m) + (u - m) + (v - m)$ equal to? 2013 II

- (a) 0 (b) s
(c) $\frac{(p + v)}{2}$ (d) None of these

Directions (Q. Nos. 61-62) Read the following information carefully and answer the questions given below.

The median of the following distribution is 14.4 and the total frequency is 20.

Class interval	0-6	6-12	12-18	18-24	24-30
Frequency	4	x	5	y	1

61. What is x equal to? 2013 II

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

62. What is the relation between x and y ?

- (a) $2x = 3y$ (b) $3x = 2y$ (c) $x = y$ (d) $2x = y$

63. There are 45 male and 15 female employees in an office. If the mean salary of the 60 employees is ₹ 4800 and the mean salary of the male employees is ₹ 5000, then the mean salary of the female employees is 2013 I

- (a) ₹ 4200 (b) ₹ 4500 (c) ₹ 5600 (d) ₹ 6000

64. The mean of 7 observations is 7. If each observation is increased by 2, then the new mean is

- (a) 12 (b) 10 (c) 9 (d) 8

Directions (Q. Nos. 65-67) Read the following information carefully to answer the questions that follow.

In a frequency distribution having class intervals 0-10, 10-20, 20-30 and 30-40 the respective frequencies are $x, x+8, x-2$ and $x-4$ and the arithmetic mean of the distribution is 17.8. 2013 I

65. The value of x is

- (a) 3 (b) 6 (c) 8 (d) 12

66. The median lies in which one of the following class intervals?

- (a) 0-10 (b) 10-20 (c) 20-30 (d) 30-40

67. The modal class is

- (a) 0-10 (b) 10-20
(c) 20-30 (d) 30-40

68. Consider the following statements :
- A frequency distribution condenses the data and reveals its important features.
 - A frequency distribution is an equivalent representation of original data.

Which of the statement(s) given above is/are correct?

- (a) Only I (b) Only II
(c) Both I and II (d) Neither I nor II

69. Which one of the following statements is correct? **2013 I**

- A frequency polygon is obtained by connecting the corner points of the rectangles in a histogram
- A frequency polygon is obtained by connecting the mid-points of the tops of the rectangles in a histogram
- A frequency polygon is obtained by connecting the corner points of the class intervals in a histogram
- None of the above

70. In histogram the width of the bars is proportional to **2012 I**

- (a) Frequency (b) Number of classes
(c) Class interval (d) None of these

71. Which one of the following relations for the numbers 10, 7, 8, 5, 6, 8, 5, 8 and 6 is correct?

- (a) Mean = Median (b) Mean = Mode **2012 II**
(c) Mean > Median (d) Mean > Mode

72. The mean of 100 values is 45. If 15 is added to each of the first forty values and 5 is subtracted from each of the remaining sixty values, then the new mean becomes **2012 II**

- (a) 45 (b) 48 (c) 51 (d) 55

73. Which of the following pair(s) is/are correctly matched?

- Weight of a person : Continuous variable
- Educational qualification of the person : Attribute

Codes

- (a) Only I (b) Only II
(c) Both I and II (d) Neither I nor II

74. Consider the following distribution :

Value of the variable	1	2	3	4	5
Frequency	3	f	6	5	3

For what value of f , is the arithmetic mean of the above distribution 3.1? **2012 I**

- (a) 2 (b) 3 (c) 4 (d) 5

75. Which one among the following statements is correct? **2012 I**

- (a) Simple bar diagrams are those diagrams which show two characteristics of the data

- (b) In pie diagrams all the items are converted into angles
(c) A bar diagram is one in which data are shown in terms of bars
(d) Bar diagrams present data through length and breadth

76. Consider the following statements :

- The data collected by the investigator to be used by himself are called primary data.
- The data obtained from government agencies are called secondary data.

Which of the statement(s) given above is/are correct? **2012 I**

- (a) Only I (b) Only II
(c) Both I and II (d) Neither I nor II

77. Let the observations at hand be arranged in increasing order. Which one of the following measures will not be affected when the smallest and the largest observations are removed? **2012 I**

- (a) Mean (b) Median
(c) Mode (d) Standard deviation

78. If the population figures are given for each State of India, then the data can be classified as

- (a) qualitative (b) quantitative **2011 II**
(c) chronological (d) geographical

79. Consider the following statements in respect of the set $S = (1, 2, 3, \dots, n)$.

- $(n + 1)/2$ is the median of the numbers in S .
- n is the mode of the numbers in S .

Which of the statement(s) given above is/are correct? **2011 II**

- (a) Only I (b) Only II
(c) Both I and II (d) Neither I nor II

Directions (Q. Nos: 80-81) The itemwise expenditure of a non-government organisation for the year 2008-2009 is given below. **2011 I**

Item	Expenditure (in ₹ lakh)
Salary of employees	6
Social welfare activities	7
Office contingency	3
Vehicle maintenance	4
Rent and hire charges	2.5
Miscellaneous expenses	1.5

The above data are represented by a pie diagram.

80. What is the sectorial angle of the largest sector?

- (a) 120° (b) 105°
(c) 90° (d) 85°

81. What is the difference in the sectorial angles of the largest and the smallest sectors?

- (a) 90° (b) 85°
(c) 82.5° (d) 77.5°

Directions (Q. Nos. 82-83) The following table gives the frequency distribution of life length in hours of 100 electric bulbs having median life 20 h. 2011 I

Life of bulbs (in h)	Number of bulbs
8-13	7
13-18	x
18-23	40
23-28	y
28-33	10
33-38	2

82. What is the missing frequency of x ?
 (a) 31 (b) 27 (c) 24 (d) 14
83. What is the missing frequency of y ?
 (a) 27 (b) 24 (c) 14 (d) 11
84. Consider the following statements in respect of a histogram:

- I. The histogram consists of vertical rectangular bars with a common base such that there is no gap between consecutive bars.
 II. The height of the rectangle is determined by the frequency of the class it represents.

Which of the statements given above is/are correct? 2011 I

- (a) Only I (b) Only II
 (c) Both I and II (d) Neither I nor II
85. The arithmetic mean of 10 numbers was computed as 7.6. It was later discovered that a number 8 was wrongly read as 3 during the computation. What should be the correct mean? 2011 I

- (a) 7.1 (b) 7.6 (c) 8.1 (d) 8.6

86. For a set of positive numbers, consider the following statements.

- I. If each number is reduced by 2, then the geometric mean of the set may not always exist.
 II. If each number is increased by 2, then the geometric mean of the set is increased by 2.

Which of the statements given above is/are correct? 2010 II

- (a) Only I (b) Only II
 (c) Both I and II (d) Neither I nor II

87. Consider the following frequency distribution:

Class	0-10	0-20	0-30	0-40	0-50
Frequency	3	8	14	14	20

What is the above frequency distribution known as? 2010 II

- (a) Cumulative distribution in more than type
 (b) Cumulative distribution in less than type
 (c) Continuous frequency distribution
 (d) None of the above

88. Consider the following statements in respect of histogram:

- I. Histogram is an equivalent graphical representation of the frequency distribution.
 II. Histogram is suitable for continuous random variables, where the total frequency of an interval is evenly distributed over the interval.

Which of the statements given above is/are correct? 2010 II

- (a) Only I (b) Only II
 (c) Both I and II (d) Neither I nor II

89. Let $(x_1, y_1), (x_2, y_2), \dots, (x_n, y_n)$ are n pairs of positive numbers. The arithmetic mean and geometric mean of any set of positive numbers (c_1, c_2, \dots, c_n) are denoted by $M(c_i), G(c_i)$ respectively:

Consider the following statements:

- I. $M(x_i + y_i) = M(x_i) + M(y_i)$
 II. $G(x_i y_i) = G(x_i) G(y_i)$

Which of the statements given above is/are correct? 2010 II

- (a) Only I (b) Only II
 (c) Both I and II (d) Neither I nor II

90. What is the weighted mean of first 10 natural numbers whose weights are equal to the corresponding number? (2010 I)

- (a) 7 (b) 5.5
 (c) 5 (d) 4.5

Directions (Q. Nos. 91-92) The average age of 6 persons living in a house is 23.5 yr. Three of them are majors and their average age is 42 yr. The difference in ages of the three minor children is same. (2010 I)

91. What is the mean of the ages of minor children?

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

92. What is the median of the ages of minor children?

- (a) 3 yr (b) 5 yr
 (c) 7 yr (d) Cannot be determined due to insufficient data

93. A new frequency distribution is constructed by doubling each frequency of the original distribution keeping the other entries intact. The following measures are computed for both the tables.

- I. Arithmetic mean
 II. Median
 III. Harmonic mean

Which of the following statements with reference to above is correct? (2010 I)

- (a) Corresponding values of I and II only are equal in both the distributions
- (b) Corresponding values of I and III only are equal in both the distributions
- (c) Corresponding values of II and III only are equal in both the distributions
- (d) Corresponding values of I, II and III are equal in both the distributions

Directions (Q. Nos. 94-96) The arithmetic mean, geometric mean and median of 6 positive numbers a, b, c, d, e, f where $a < b < c$ are $\frac{7}{3}, 2, 2$ respectively. 2010 I

94. What is the sum of the squares of all the six numbers? (a) 40 (b) 42 (c) 45 (d) 48

95. What is the value of c ? (a) 1 (b) 2 (c) 3 (d) 4

96. What is the mode? (a) 1 (b) 2 (c) 1, 2 and 4 (d) No mode

97. The following table shows the percentage of male and female coffee drinkers and non-coffee drinkers in two Towns A and B.

Attributes	Town A		Town B	
	Male	Female	Male	Female
Coffee drinkers	40%	5%	25%	15%
Non-coffee drinkers	20%	35%	30%	30%

If the total population of the Towns A and B are 10000 and 20000 respectively, then what is the

total number of female coffee drinkers in both towns? 2009 II

- (a) 8000 (b) 6000 (c) 3500 (d) 2500

98. Examples of data are given below

- I. Information on households collected by an investigator by door-to-door visits.
- II. Data on the percentage of literates, sex-wise, for the different districts of a state collected from records of the census of India.
- III. General information about families, collected by telephonic interviews.

Which one of the following in respect of the above is correct? 2009 II

- (a) I and II are primary data
- (b) I and III are primary data
- (c) II and III are primary data
- (d) I, II and III are primary data

99. Which one of the following represents statistical data? 2009 I

- (a) The names of all owners of shops located in a shopping complex
- (b) A list giving the names of all States of India
- (c) A list of all European countries and their respective capital cities
- (d) The volume of a rainfall in certain geographical area, recorded every month for 24 consecutive months

100. Consider the following types of data :

- I. Marks of students who appeared for a test of 100 marks.
- II. Collar sizes of 200 shirts sold in a week.
- III. Monthly incomes of 250 employees of a factory.

For which of the above data, mode is a suitable measure of central tendency? 2009 I

- (a) I and II (b) Only II
- (c) I and III (d) I, II and III

Answers

- | | | | | | | | | | |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| 1. (c) | 2. (b) | 3. (b) | 4. (c) | 5. (b) | 6. (a) | 7. (b) | 8. (c) | 9. (c) | 10. (d) |
| 11. (b) | 12. (d) | 13. (b) | 14. (c) | 15. (c) | 16. (b) | 17. (d) | 18. (a) | 19. (a) | 20. (c) |
| 21. (a) | 22. (b) | 23. (b) | 24. (b) | 25. (b) | 26. (d) | 27. (a) | 28. (c) | 29. (d) | 30. (d) |
| 31. (a) | 32. (b) | 33. (c) | 34. (b) | 35. (b) | 36. (d) | 37. (c) | 38. (b) | 39. (a) | 40. (a) |
| 41. (a) | 42. (b) | 43. (c) | 44. (d) | 45. (b) | 46. (c) | 47. (c) | 48. (a) | 49. (c) | 50. (d) |
| 51. (a) | 52. (c) | 53. (c) | 54. (b) | 55. (c) | 56. (c) | 57. (a) | 58. (a) | 59. (d) | 60. (a) |
| 61. (a) | 62. (b) | 63. (a) | 64. (c) | 65. (d) | 66. (b) | 67. (b) | 68. (c) | 69. (b) | 70. (c) |
| 71. (a) | 72. (b) | 73. (a) | 74. (b) | 75. (a) | 76. (c) | 77. (b) | 78. (a) | 79. (d) | 80. (b) |
| 81. (c) | 82. (b) | 83. (c) | 84. (c) | 85. (c) | 86. (d) | 87. (b) | 88. (c) | 89. (c) | 90. (a) |
| 91. (c) | 92. (b) | 93. (d) | 94. (b) | 95. (d) | 96. (d) | 97. (c) | 98. (b) | 99. (d) | 100. (b) |