Choose the best answer from a, b, c, d

In one month, the total costs (to the nearest pound) of the calls made by 23 males mobile phone owners were:

Cost	5 to less than 10	10 to less than 15	15 to less than 20	20 to less than 25	25 to less than 30
Frequency	1	5	10	6	1

1) Thefourth-class lower boundary is

a) 20	b) 25
c) 6	d) 5

2) In one month, the total costs (to the nearest pound) of the calls made by 23 males mobile phone owners were:

Cost	5 to less than 10	10 to less than 15	15 to less than 20	20 to less than 25	25 to less than 30
Frequency	1	5	10	6	1

The third-class midpoint equals

a) 10	b) 17.5
c) 15	d) 20

3) In one month, the total costs (to the nearest pound) of the calls made by 23 males mobile phone owners were:

Cost	5 to less than 10	10 to less than 15	15 to less than 20	20 to less than 25	25 to less than 30
Frequency	1	5	10	6	1

The fourth-class lower boundary is

a) 20	b) 25
c) 6	d) 5

4) In one month, the total costs (to the nearest pound) of the calls made by 23 males mobile phone owners were:

Cost	5 to less than 10	10 to less than 15	15 to less than 20	20 to less than 25	25 to less than 30
Frequency	1	5	10	6	1

The value of n is

a) 5	b) 10
c) 6	d) 23

5) The mean for this distribution is computed using the formula

a) $\frac{\sum mf}{n}$	b) $\frac{\sum m^2 f}{n}$
c) $\frac{\sum m^2 f - \frac{(\sum mf)^2}{n}}{n-1}$	d) $\frac{\sum m^2 f - \frac{(\sum mf)^2}{n}}{n}$

6) In one month, the total costs (to the nearest pound) of the calls made by 23 males mobile phone owners were:

Cost	5 to less than 10	10 to less than 15	15 to less than 20	20 to less than 25	25 to less than 30
Frequency	1	5	10	6	1

mf for the first class equal

a) 407.5	b) 7.5
c) 1	d) None of the above

7) In one month, the total costs (to the nearest pound) of the calls made by 23 males mobile phone owners were:

Cost	5 to less than 10	10 to less than 15	15 to less than 20	20 to less than 25	25 to less than 30
Frequency	1	5	10	6	1

$\sum mf$ =

a) 22	b) 407.5
c) 7.5	d) 7693.75

8) In one month, the total costs (to the nearest pound) of the calls made by 23 males mobile phone owners were:

Cost	5 to less than 10	10 to less than 15	15 to less than 20	20 to less than 25	25 to less than 30
Frequency	1	5	10	6	1

$\sum m^2 f$ =

a) 407.5	b) 25

c) 7693.75 d) None of the above

9) In one month, the total costs (to the nearest pound) of the calls made by 23 males mobile phone owners were:

Cost	5 to less than 10	10 to less than 15	15 to less than 20	20 to less than 25	25 to less than 30
Frequency	1	5	10	6	1

The mean value is

a) 21.55 b) -6379.38

c) 17.72 d) 5

10) In one month, the total costs (to the nearest pound) of the calls made by 23 males mobile phone owners were:

Cost	5 to less than 10	10 to less than 15	15 to less than 20	20 to less than 25	25 to less than 30
Frequency	1	5	10	6	1

The cumulative third-class boundaries for this distribution is

a) 5 to less than 20 b) 15 to less than 20

c) 5 to less than 30 d) a and b

11) In one month, the total costs (to the nearest pound) of the calls made by 23 males mobile phone owners were:

Cost	5 to less than 10	10 to less than 15	15 to less than 20	20 to less than 25	25 to less than 30
Frequency	1	5	10	6	1

The cumulative frequency for the second class is

a) 5 b) 23

c) 6 d) 16

12) In one month, the total costs (to the nearest pound) of the calls made by 23 males mobile phone owners were:

Cost	5 to less than 10	10 to less than 15	15 to less than 20	20 to less than 25	25 to less than 30
Frequency	1	5	10	6	1

The median class is

a) 5 to less than 10 b) 10 to less than 15

c) 15 to less than 20 d) None of the above

13) In one month, the total costs (to the nearest pound) of the calls made by 23 males

mobile phone owners were:

Cost	5 to less than 10	10 to less than 15	15 to less than 20	20 to less than 25	25 to less than 30
Frequency	1	5	10	6	1

The median formula is given by

a) $l_1 + \frac{l_2 - l_1}{f}(m - c)$

b) $l_1 + \frac{f_1 - f_0}{(f_1 - f_0) + (f_1 - f_2)} \times i$

c) $l_1 + \frac{l_2 + l_1}{f}(m - c)$

d) $l_1 - \frac{f_1 - f_0}{(f_1 - f_0) + (f_1 - f_2)} \times i$

14) In one month, the total costs (to the nearest pound) of the calls made by 23 males

mobile phone owners were:

Cost	5 to less than 10	10 to less than 15	15 to less than 20	20 to less than 25	25 to less than 30
Frequency	1	5	10	6	1

The median value is

a) 17.5

b) 18

c) 17.78

d) 30

15) In one month, the total costs (to the nearest pound) of the calls made by 23 males

mobile phone owners were:

Cost	5 to less than 10	10 to less than 15	15 to less than 20	20 to less than 25	25 to less than 30
Frequency	1	5	10	6	1

Q_1value is

a) 15

b) 10

c) 12.5

d) None of the above

16) In one month, the total costs (to the nearest pound) of the calls made by 23 males

mobile phone owners were:

Cost	5 to less than 10	10 to less than 15	15 to less than 20	20 to less than 25	25 to less than 30
Frequency	1	5	10	6	1

The distribution is

a) symmetric

b) uniform

c) asymmetrical Distribution

d) None of the above

17) In one month, the total costs (to the nearest pound) of the calls made by 23 males

mobile phone owners were:

Cost	5 to less than 10	10 to less than 15	15 to less than 20	20 to less than 25	25 to less than 30
Frequency	1	5	10	6	1

The mode class boundaries is

a) 15 to less than 20
b) 25 to less than 30
c) 10
d) a and c

18) During a particular summer month, the eight salespeople in a heating and air-conditioning firm sold the following number of central air-conditioning units: 8, 11, 5, 14, 8, 11, 16, 11. Considering this month as the statistical population of interest

The mean formula for these data is given by

a) $\frac{\sum x}{N}$
b) $\frac{\sum x}{N-1}$
c) $\frac{\sum mf}{N}$
d) $\frac{\sum m^2 f}{N}$

19) During a particular summer month, the eight salespeople in a heating and air-conditioning firm sold the following number of central air-conditioning units: 8, 11, 5, 14, 8, 11, 16, 11. Considering this month as the statistical population of interest

The median for this data is

a) 10.5
b) 11
c) 84
d) 8

20) During a particular summer month, the eight salespeople in a heating and air-conditioning firm sold the following number of central air-conditioning units: 8, 11, 5, 14, 8, 11, 16, 11. Considering this month as the statistical population of interest

The mode for this data set is

a) 11
b) 13.4
c) 3.7
d) 10.5

21) $\sum(x-\mu)$ equals

a) 0
b) -0.5
c) minimum
d) the range

22) During a particular summer month, the eight salespeople in a heating and air-conditioning firm sold the following number of central air-conditioning units: 8, 11, 5, 14, 8, 11, 16, 11. Considering this month as the statistical population of interest

the range is

a) 5
b) 16

c) 0	d) 11

23) During a particular summer month, the eight salespeople in a heating and air-conditioning firm sold the following number of central air-conditioning units: 8, 11, 5, 14, 8, 11, 16, 11. Considering this month as the statistical population of interest

$\sum x^2$ equals

a) 84	b) 13.4
c) 968	d) 11

24) During a particular summer month, the eight salespeople in a heating and air-conditioning firm sold the following number of central air-conditioning units: 8, 11, 5, 14, 8, 11, 16, 11. Considering this month as the statistical population of interest

The third quartile is

a) 10.75	b) 8
c) 12.5	d) 16

25) The sum of the squared deviations of the individual items from the arithmetic mean is always

a) maximum	b) minimum
c) zero	d) arbitrary value

26) it is influenced by the extreme values

a) The mode	b) The geometric mean
c) The mean	d) The mode

27) A survey that includes every member of the population is called a

a) sample survey	b) census
c) prediction	d) case study

28) A sample drawn in such a way that each element of the population has a chance of being selected is called a

a) simple random sample	b) random sample
c) representative sample	d) sample survey

29) If the value of Correlation Coefficient = +1.2 thisindicates

a) some mistake in our calculations	b) very high degree of positive correlation
c) positive correlation	d) perfect positive correlation

30) in the case of open-ended distributions, it is possible to compute the

a) Median	b) Mean
c) Range	d) All of the above

31) If the mean > median > mode, then the distribution is

a) symmetrical	b) uniform
c) skewed to the right	d) skewed to the left

32) In the case of the qualitative data where the items are not counted or measured but are scored or ranked, it is the most appropriate measure of central tendency.

a) The mode	b) The mean
c) The median	d) The geometric mean

33) It is a suitable measure while comparing the dispersion of two or more distributions

a) The coefficient of variation	b) The standard deviation
c) The range	d) The standardized value

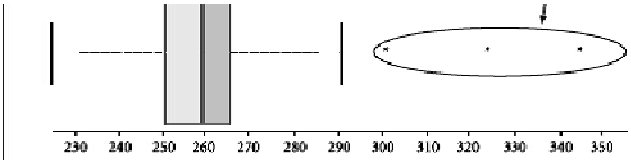
34) The square of Pearsonian correlation coefficient is known as

a) The regression coefficient	b) coefficient of determination
c) Spearman Correlation	d) None of the above

35) The coefficient of skewness for the sales is given by

a) $\frac{mean-mode}{SD}$	b) $\frac{3(mean-median)}{SD}$
c) $\frac{Q_3-2Q_2+Q1}{Q_3-Q_1}$	d) all of the above

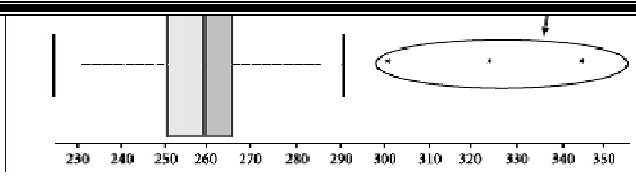
36) Consider the following shape



This shape is called

a) histogram	b) box-whisker Plot
c) stem and leaf	d) polygon

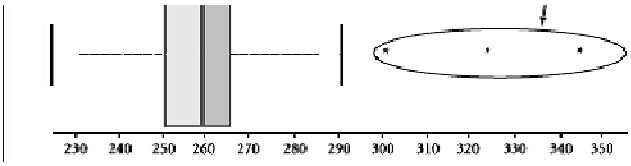
37) Consider the following shape



The median is given by

a) 250	b) 265
c) 259	d) 290

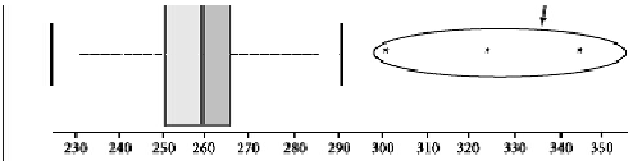
38) Consider the following shape



The maximum value in the data set is

a) 290	b) 345
c) 265	d) Can't determine it from the graph

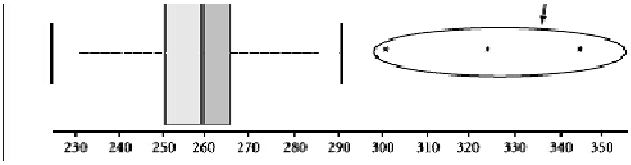
39) Consider the following shape



Q_1 value can be

a) 250	b) 265
c) 290	d) 345

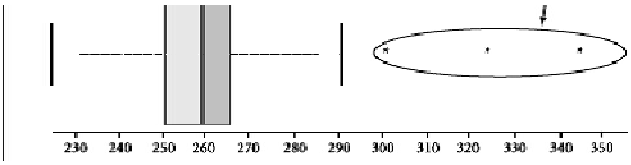
40) Consider the following shape



The number of outliers in this data set is

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

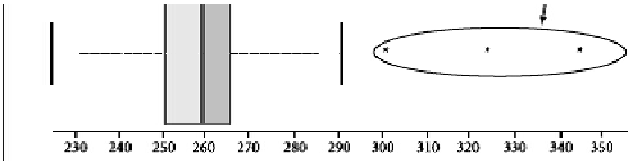
41) Consider the following shape



A dispersion value can be

a) 16	b) 65
c) 50	d) None of the above

42) Consider the following shape



These data are

a) right skewed	b) left skewed
c) uniform	d) symmetric

To study the relation between X as independent variable and Y as dependent variable we got the following result,

$\sum x = 53, \sum xy = 5081, \sum x^2 = 247, \sum y^2 = 110797$ and $n = 12$

Use the data for (Q44 to Q 55)

43) The linear relationship between X and Y can be described using

a) $X = a + bY$	b) $Y = a + bX^2$
c) $X = e^{a+by}$	d) a and c

44) SS_{xy} is given by

a) $\sum xy - \frac{\sum x \sum y}{n}$	b) $\sum x^2 - \frac{(\sum x)^2}{n}$
c) $\sum y^2 - \frac{(\sum x)^2}{n}$	d) $\sum x^2 - \frac{(\sum y)^2}{n}$

45) To study the relation between X as independent variable and Y as dependent variable we got the following result,

$\sum x = 53, \sum xy = 5081, \sum x^2 = 247, \sum y^2 = 110797$ and $n = 12$

SS_{xx} value equals

a) -0.89	b) -11.42
c) 0.89	d) None of the above

46) To study the relation between X as independent variable and Y as dependent variable we got the following result,

$\sum x = 53, \sum xy = 5081, \sum x^2 = 247, \sum y^2 = 110797$ and $n = 12$

The suitable correlation coefficient to be computed is

a) Pearson	b) Spearman

c) Chebyshev's	d) Bowley

47) To study the relation between X as independent variable and Y as dependent variable we got the following result,

$\sum x = 53, \sum xy = 5081, \sum x^2 = 247, \sum y^2 = 110797$ and $n = 12$

The correlation coefficient value is

a) -0.88	b) 0.88
c) -1	d) None of the above

48) To study the relation between X as independent variable and Y as dependent variable we got the following result,

$\sum x = 53, \sum xy = 5081, \sum x^2 = 247, \sum y^2 = 110797$ and $n = 12$

The relation between X and Y is

a) negative	b) positive
c) perfect	d) a and b

49) In the regression line, b can be found from the formula

a) $\bar{Y} - a\bar{X}$	b) $\bar{X} - a\bar{Y}$
c) $\frac{SS_{xy}}{SS_{yy}}$	d) $\frac{SS_{xy}}{SS_{xx}}$

50) To study the relation between X as independent variable and Y as dependent variable we got the following result,

$\sum x = 53, \sum xy = 5081, \sum x^2 = 247, \sum y^2 = 110797$ and $n = 12$

The value of b is

a) -99.99	b) -0.88
c) 99.99	d) None of the above

51) To study the relation between X as independent variable and Y as dependent variable we got the following result,

$\sum x = 53, \sum xy = 5081, \sum x^2 = 247, \sum y^2 = 110797$ and $n = 12$

The determination coefficient value is

a) -0.88	b) -99.99
c) 0.78	d) None of the above

52) To study the relation between X as independent variable and Y as dependent variable

we got the following result,

$$\sum x = 53, \sum xy = 5081, \sum x^2 = 247, \sum y^2 = 110797 \text{ and } n = 12$$

The standard deviation of errors value is

a) 0.53	b) 1.57
c) 3.19	d) None of the above

53) To study the relation between X as independent variable and Y as dependent variable we got the following result,

$$\sum x = 53, \sum xy = 5081, \sum x^2 = 247, \sum y^2 = 110797 \text{ and } n = 12$$

The expected value of Y when X= 5

a) 5	b) 95.56
c) 104.4	d) None of the above

54) If all points cluster in an ascending line this would suggest what?

a) There would be a weak positive relationship	b) There would be a strong positive relationship
c) There would be a strong negative relationship	d) There would be a non-linear relationship

55) In a questionnaire, respondents are asked to mark their marital status. Marital status is an example of the

a) ordinal scale	b) nominal scale
c) ratio scale	d) interval scale

56) The mean value for X is 53.2, the mean value of Y is 27.9, the regression coefficient of Y on X equals -1.5 and the regression coefficient of X on Y is -0.2

When X=60 the value of Y is

a) 12	b) 17.7
c) Cannot determine	d) None of the above

57) The mean value for X is 53.2, the mean value of Y is 27.9, the regression coefficient of Y on X equals -1.5 and the regression coefficient of X on Y is -0.2

The coefficient of correlation between X and Y is

a) 0.55	b) -0.55
c) 0.3	d) -0.3

With Best Wishes