Find out Closing Stock in the following Situations:

Question	1	2	3	4	5	6	7	8	9	10
Sales	300	400	500	900	400	500	600	420	360	900
Opening Stock	100	200	120	150	130	140	?	?	?	?
Purchases	350	320	430	400	300	700	840	500	100	800
GP	200	20% of Sales	30% Of Sales	33.33% of sales	20% of Cost	30% Of Cost	33.33% of Cost	25% Of Sales	20% OF cost	50% of Cost
Closing Stock	?	?	?	?	?	?	Double of Opening Stock	25% More than Opening Stock	30% less than Opening Stock	120% of Opening Stock

11. Find the value of Closing Stock and Cost of material Consumed:

Date	1st	15th	16th	23rd
Details	Opening Stock	Purchased	Purchased	Issued
Units	6000	3000	1000	8000
Rate Per Unit	Rs. 40	Rs. 44	Rs.46	---

12. Find the effective cost per unit purchased by A ltd:

Units Purchased	Price Per Unit	Discount (% of purchase price)	Sales Tax (% of purchase price)	Excise Duty (% of purchase price)	CENVAT Credit (% of Excise Duty)	Additional Packing	Units Lost in transit	Further Expected Loss
40000	90	10%	20%	16%	40%	Rs.2000	200	3%

13. Find the value of Closing Stock and Cost of material Consumed:

Date	1st	15th	16th	23rd	25th	29th
Details	Opening Stock	Purchased	Purchased	Issued	Purchased	Issued
Units	12000	5000	3000	13000	3000	9000
Rate Per Unit	Rs. 20	Rs. 26	Rs.22	---	Rs.28	---

14. Find the effective cost per unit of Material P & Material Q purchased by X ltd: (Please Note the Octroi Is divided between P & Q in the ratio of their Units as both came in the same Truck)

Material	Units Purchased	Price Per Unit	Discount (% of purchase price)	Sales Tax (% of purchase price)	Excise Duty (% of purchase price)	CENVAT Credit (% of Excise Duty)	Octroi Combine Rs.	Additional Packing	Units Lost in transit	Further Expected Loss
P	20000	80	10%	12%	10%	80%	20,000	Rs.5000	300	5%
Q	30000	90	20%	14%	12%	60%		Rs.3000	100	8%

15. Find the value of physical stock by reconciliation statement :

	Book stock as on 31st March 2017	**Rs.5,00,000**
1	Goods purchased, documents received but still in transit	Rs. 1,00,000
2	Goods rejected by godown but not informed to Accounts department	Rs.40,000

3	Goods Sold, documents sent but goods are still in godown	Rs.25,000
4	Godown informed that goods rejected but documents due	Rs.30,000

16. Solve the same question starting with physical stock and finding back the Book stock.

17. A ltd made the valuation of the stock as on 7th April 2017, find the value of stock on 31st march 2017

	Stock as on 7th April 2017	Rs. 23,00,000
	During 7 days	
1	Purchases	Rs.4,00,000
2	Purchase Return	Rs. 1,00,000
3	Sales @ selling price	Rs.10,00,000
4	Sales Return at Selling Price	Rs. 2,00,000
5	Goods with our agent not added above	Rs.3,00,000
6	Gross profit ration	20% of sales

18. B ltd made the valuation of the stock as on 7th April 2017, find the value of stock on 31st march 2017

	Stock as on 7th April 2017	Rs. 18,00,000
	During 7 days	
1	Purchases	Rs.5,00,000
2	Purchase Return	Rs. 2,00,000
3	Sales @ selling price	Rs.13,00,000
4	Sales Return at Selling Price	Rs. 1,00,000
5	Goods with our agent not added above	Rs.4,00,000
6	Gross profit ration	33.33% OF Cost

CA Foundation: Maths

2.MEASURES OF CENTRAL TENDENCY

Select the correct alternative out of the given ones:

1) Measures of central tendency are known as
(A) Difference
(B) Averages
(C) Both
(D) None of these

2) Measures of central tendency for a given set of observations measures
(A) The scatter ness of the observation
(B) The central location of the observations
(C) Both (A) and (B)
(D) None of these

3) The average has relevance for
(A) Homogeneous population
(B) Heterogeneous population
(C) Both (A) and (B)
(D) None of these

4) A measure of central tendency tries to estimate the
(A) Central value
(B) Lowe value
(C) Upper value
(D) None of these

5) The number of measure of central tendency is
(A) Two
(B) Three
(C) Four
(D) five

6) A. M. is never less the G.M.
(A) True
(B) False
(C) Both (A) and (B)
(D) None of these

7) While computing the A.M. from a grouped frequency distribution, we assume that
(A) The classes are of equal length
(B) The classes have equal frequency
(C) All the values of a class are equal to the mid-value of that class
(D) None of these

8) If the class interval is open-end, then it is difficult to find
(A) Frequency
(B) A.M.
(C) Both (A) and (B)
(D) None of these

9) The words 'mean' or 'average' only refer to
(A) A.M
(B) G.M
(C) H.M
(D) None of these

10) Which of the following statements is wrong?
(A) Mean in rigidly defined
(B) Mean is not affected due to sampling fluctuations.
(C) Mean has some mathematical properties.
(D) All these

11) When all values occur with equal frequency, there is No.
(A) Mode
(B) Mean
(C) Median
(D) None of these

12) Weighted A.M is related to
(A) G.M
(B) Frequency
(C) H.M
(D) None of these

13) The most commonly used measure of central tendency is
(A) A.M
(B) Median
(C) Mode
(D) Both G.M and H.M

14) Weighted averages are considered when
(A) The data are not classified.
(B) The data are put in the form of grouped frequency distribution
(C) All the observations are not of equal importance.
(D) Both (A) and (C)

15) The average discovers
(A) Uniformity in variability.
(B) Variability in uniformity of distribution
(C) Both (A) and (B)
(D) None of these

16) Each different values is considered only once for
(A) Simple average
(B) Weight average
(C) Both (A) and (B)
(D) None of these

17) Which of the following statements is true?
(A) Usually means is the best measure of central tendency.
(B) Usually median is the best measure of central tendency.
(C) Usually mode is the best measure of central tendency.
(D) Normally, G.M is the best measure of central tendency.
18) When a frequency distribution is given, the frequencies of values are themselves treated as weights.
(A) True
(B) False
(C) Both (A) and (B)
(D) None of these
19) The sum of the squares of deviations of a set of observations has the smallest value, when the deviations are taken from their
(A) A.M
(B) H.M
(C) G.M
(D) None of these
20) For a given set of observations A.M is greater than G.M
(A) True
(B) False
(C) Both (A) and (B)
(D) None of these
21) Frequencies are generally used as
(A) Range
(B) Weights
(C) Mean
(D) None of these
22) The values of all items are taken into consideration in the calculation of
(A) Median
(B) Mean
(C) Mode
(D) None of these
23) The word 'average' used in 'simple average' and 'weighted average' generally refers to
(A) Median
(B) Mode
(C) A.M or G.M or H.M
(D) None of these
24) The total of a set of observations is equal to the product of their numbers and the
(A) A.M
(B) G.M
(C) A.M
(D) None of these
25) Simple average is sometimes called
(A) Weighted average
(B) Unweighted average
(C) Relative average
(D) None of these
26) The algebraic sum of deviations of observations from their A.M is
(A) 2
(B) -1
(C) 1
(D) 0.
27) G.M is less than H.M
(A) True
(B) False
(C) Both
(D) None of these
28) Which of the following measure of the central tendency is difficult to compute?
(A) Mean
(B) Median
(C) Mode
(D) G.M
29) You are given the population of India for the courses of 1981 and 1991. you are to find the population of India at the middle of the period by averaging these population figures, assuming a consistent rate of increase of population. What is the suitable of average in this case
(A) A.M
(B) G.M
(C) H.M
(D) None of these
30) Which measure(s) of central tendency is(are) considered for finding the average rates?
(A) A.m
(B) G.m
(C) H.m
(D) Both (B) and (C)
31) Calculation of G.M is more difficult than
(A) A.M
(B) H.m
(C) Median
(D) None of these
32) When a firm registers both profits and losses, which of the following measure of central tendency cannot be considered?

(A) A.m
(B) G.m
(C) Median
(D) Mode.

33) G.M is defined only with
(A) All observation have the same sign and none is zero
(B) All observations have the different sign and none is zero
(C) All observations have the same sign and one is zero
(D) All observation have the different sign and one is zero

34) More laborious numerical calculations involves in G.M than A.M
(A) True
(B) False
(C) Both
(D) None of these

35) G.M is useful in construction of index number
(A) True
(B) False
(C) Both
(D) None of these

36) In ..... the quantities are in ratios.
(A) A.M
(B) G.M
(C) H.M
(D) None of these

37) ..... is not mush affected by fluctuations of sampling
(A) A.M
(B) G.M
(C) H.M
(D) None of these

38) ..... is the most stable of all the measures of central tendency
(A) G.M
(B) H.M
(C) S.M
(D) None of these

39) ..... of a set of observations is defined to be their sum, divided by the number of observations.
(A) H.M
(B) G.M
(C) A.M
(D) None of these

40) ..... is used when variability has also to be calculated.
(A) A.M
(B) G.M
(C) H.M
(D) None of these

41) Logarithm of G.M is the ..... of the different values.
(A) Weighted mean
(B) Simple mean
(C) Both
(D) None of these

42) Mean is of ..... types.
(A) 3
(B) 4
(C) 8
(D) 5.

43) ..... average is obtained on dividing the total of a set of observations by their number
(A) Simple
(B) Weighted
(C) Both
(D) None of these

44) ..... is useful in averaging ratios, rates and percentages.
(A) A.M
(B) G.M
(C) H.M
(D) None of these

45) G.M of a set on n observations is the ..... root not their product.
(A) (n/2)th
(B) (n+1)th
(C) nth
(D) (n-1)th.

46) ..... and ..... cannot be calculated if any observation is zero.
(A) G.M & A.M
(B) H.M & A.M
(C) H.M & G.M
(D) None of these

47) ..... has a limited use
(A) A.M
(B) G.M
(C) H.M
(D) None of these

48) ..... is the reciprocal of the A.M of reciprocal of observations.
(A) H.M
(B) G.M
(C) Both
(D) None of these

49) ..... is used when the sum of deviations from the average should be least.
(A) Mean
(B) Mode
(C) Median
(D) None of these

50) Half of the numb3er in an ordered set have values less than the ..... values greater than the .....
(A) Mean, median
(B) Median, median
(C) Mode, mean
(D) None of these

51) In the case of continuous frequency distribution the size of the ..... item indicates class interval in which the median lies.
(A) (n-1)/2th
(B) (n+1)/2th
(C) (n/2)th
(D) None of these

52) ..... is a good substitute to a weighted average.
(A) A.M
(B) G.M
(C) H.M
(D) None of these

53) ..... is used when rate of growth or decline is required.
(A) Mode
(B) A.M
(C) G.M
(D) None of these

54) The deviations from median are ..... it negative signs are ignored as compared to other measures of central tendency.
(A) Minimum
(B) Maximum
(C) Same
(D) None of these

55) The middle most value of a set of observations is
(A) Median
(B) Mode
(C) Both
(D) None of these

56) Median is unaffected by extreme values.
(A) True
(B) False
(C) Both
(D) None of these

57) In case of an even number of observations which of the following is median?
(A) Any of the two middle-most value
(B) The simple average of these two middle values
(C) The weighted average of those two middle values
(D) Any of these

58) The value of the middle –most item when they are arranged in order of magnitude is called
(A) Standard deviation
(B) Mean
(C) Mode
(D) Median

59) When the distribution is symmetrical, mean, median and mode
(A) Coincide
(B) Do not coincide

(C) Both
(D) None of these

60) For open-end classification, Which of the following is the best measure of central tendency
(A) Median
(B) Mean
(C) Mode
(D) None of these

61) The values of extreme items do not influence the average in case of
(A) Median
(B) Mean
(C) Mode
(D) None of these

62) The presence of extreme observations does not affect
(A) A.M
(B) Median
(C) Mode
(D) Any of these

63) In a distribution with a single peak and moderate skewness to the right it is closer to the concentration of the distribution in case of
(A) Mean
(B) Median
(C) Both
(D) None of these

64) For an even number of values the median is the
(A) Average of two middle values

(B) Middle value
(C) Both (A) and (B)
(D) None of these

65) For a moderately skewed distribution, which of the following relationship holds?
(A) Mean-Mode=3(Mean-Median)
(B) Median-Mode=3(Mean-Median)
(C) Mean-Median=3(Mean-Mode)
(D) Mean-Median=3(Median-Mode)

66) In ..... the distribution has wide range of variations.
(A) Median
(B) Mode
(C) Mean
(D) None of these

67) ..... is used when distribution pattern has to be studied at varying levels.
(A) A.M
(B) Median
(C) G.M
(D) None of these

68) ..... is used when representative value is required and distribution is asymmetric
(A) Mode
(B) Mean
(C) Median
(D) None of these

69) ..... always lies in between the arithmetic means and mode.
(A) G.M
(B) H.M
(C) Median
(D) None of these

70) 50% of actual values will be below and 50% of will be above .....
(A) Mode
(B) Median
(C) Mean
(D) None of these

71) In ..... the distribution has open-end classes.
(A) Median
(B) Mean
(C) Standard
(D) None of these

72) ..... can be calculated from a frequency distribution with open end intervals
(A) Median
(B) Mean
(C) Mode
(D) None of these

73) ..... is equal to the value corresponding to cumulative frequency
(A) Mode
(B) Mean
(C) Median
(D) None of these

74) ..... is the value of the variable corresponding to cumulative frequency N/2
(A) Mode
(B) Mean
(C) Median
(D) None of these

75) ..... divides the total number of observations into two equal parts.
(A) Mode
(B) Mean
(C) Median
(D) None of these

76) ..... is called a positional measure.
(A) Mode
(B) Mean
(C) Median
(D) None of these

77) The number of observation smaller than ..... is the same as the number larger than it.
(A) Median
(B) Mean
(C) Mode
(D) None of these

78) The value of a variate that occur most often is called
(A) Median
(B) Mean
(C) Mode
(D) None of these

79) The class having maximum frequency is called
(A) Modal class
(B) Median class
(C) Mean class
(D) None of these

80) The value with occurs with the maximum frequency is called
(A) Median
(B) Mode
(C) Mean
(D) None of these

81) Which of the following measure(s) satisfied (satisfy) a liner relationship between two variables?
(A) Mean
(B) Median
(C) Mode
(D) All of these
82) Which one of the following is not uniquely defined?
(A) Mean
(B) Median
(C) Mode
(D) All these
83) Which of the following measure(s) possess mathematical properties?
(A) A.M
(B) G.M
(C) H.M
(D) All of these
84) For determination of mode, the class intervals should be
(A) Overlapping
(B) Maximum
(C) Minimum
(D) None of these
85) Relation between mean, median and mode is
(A) Mean-mode=2(mean...median)
(B) Mean-median=2(mean...mode)
(C) Mean-median=2(mean...mode)
(D) Mean-mode=2(mean...median)
86) For the calculation of..... the data must be arranged in the form of a frequency distribution
(A) Median
(B) Mode
(C) Mean
(D) None
87) ..... is used when most frequency occurring value is required (discrete variables).
(A) Mode
(B) Mean
(C) Median
(D) None of these
88) For calculation of ..... we have to construct a grouped frequency distribution
(A) Median
(B) Mode
(C) Mean
(D) None of these
89) ..... is used when sampling variability should be least.
(A) Mode
(B) Median
(C) Mean
(D) None of these

90) ..... is the value of the variable corresponding to the highest frequency
(A) Mode
(B) Mean
(C) Median
(D) None of these
91) For ordering shoes of various sizes for resale, a ..... size will be more appropriate.
(A) Median
(B) Modal
(C) Mean
(D) None of these
92) ..... cannot be related a algebraically.
(A) Mode
(B) Mean
(C) Median
(D) None of these
93) Extreme values have ..... effect on mode.
(A) High
(B) Low
(C) No
(D) None of these
94) Measures which are used to divide or partition, the observations into a fixed number of parts are collectively known as
(A) Partition values
(B) Quartiles
(C) Both
(D) None of these
95) There are ..... quartiles
(A) 1
(B) 3
(C) 2
(D) 4.
96) Quartiles are the values which divide a given set of observations into
(A) Two equal parts
(B) Four equal parts
(C) Five equal parts
(D) None of these
97) The second quartile is known as

(A) Median lower quartile
(B) Upper quartile
(C) None of these

98) Corresponding to second quartile, the cumulative frequency is
(A) N/4
(B) 2 N/4
(C) 3 N/4
(D) None of these

99) The values which divide the total number of observations into 10 equal parts are
(A) Quartiles
(B) Percentiles
(C) Deciles

100) ..... divide the total number observation into 4 equal parts.
(A) Median
(B) Deciles
(C) Quartiles
(D) Percentiles

101) Lower quartile is
(A) First quartile
(B) Second quartile
(C) Upper quartile
(D) None of these

102) ..... quartile is known as Upper quartile
(A) First
(B) Second
(C) Third
(D) None of these

103) The lower and upper quartiles are used to define.
(A) Standard deviation
(B) Quartile deviation
(C) Both (A) and (B)
(D) None of these

104) Between second and upper quartile, the frequency is equal to
(A) 3 N/4
(B) N/4
(C) N/2
(D) None of these

105) Corresponding to upper quartile, the cumulative frequency is
(A) 3 N/4
(B) 2 N/4
(C) N/2
(D) None of these

106) For grouped frequency distribution ..... is equal to the value corresponding to cumulative frequency N/4
(A) Median
(B) 1st quartile
(C) 3rd quartile
(D) None of these

107) ..... are used for measuring central tendency, dispersion and skewness.
(A) Median
(B) Deciles
(C) Percentiles
(D) quartiles

108) Quartiles can be determined graphically using
(A) Histogram
(B) Frequency Polygon
(C) Ogive
(D) Pie chart.

109) Between first and second quartile, the frequency is equal to
(A) 3 N/4
(B) N/2
(C) N/4
(D) None of these

110) For grouped frequency distribution ..... is equal to the value corresponding to cumulative frequency 3N/4
(A) Median
(B) 1st quartile
(C) 3rd quartile
(D) None of these

111) Ninth Decline lies in the class interval of the
(A) (n/9)th
(B) (9n/10)th
(C) (9n/20)th
(D) None of these

112) There are ..... deciles.
(A) 7
(B) 8
(C) 9
(D) 10

113) Fifth decline is equal to
(A) Mode
(B) Median
(C) Mean
(D) None of these

114) For grouped frequency distribution ..... is equal to the value corresponding to cumulative frequency kN/10
(A) Median
(B) kth percentile
(C) kth decile
(D) None of these

115) ..... is equal to the value corresponding to cumulative frequency k(N+1)/10 from simple frequency distribution
(A) Median
(B) kth decile
(C) kth percentile
(D) None of these

116) The values which divide the total number of observations into 100 equal parts is
(A) Percentiles
(B) Quartiles
(C) Deciles
(D) None of these

117) 50th percentile is known as
(A) 50th decile
(B) 50th quartile
(C) Mode
(D) Median.

118) 25th percentile is equal to
(A) 1st quartile
(B) 25th quartile
(C) 24th quartile
(D) None of these

119) Calculation of quartiles, deciles percentiles may be obtained graphically from
(A) Frequency Polygon
(B) Histogram
(C) Ogive
(D) None of these

120) ..... is equal to the value corresponding to cumulative frequency k(N+1)/100 from simple frequency distribution
(A) kth decile
(B) kth percentile
(C) Both
(D) None of these

121) For the values of a variable 5, 2, 8, 3, 7, 4, the median is:
(A) 4
(B) 4, 5
(C) 5
(D) None of these

122) Variable: 2 3 4 5 6 7
No. of men: 5 6 8 13 7 4
mode is:
(A) 6
(B) 4
(C) 5
(D) None of these

ANSWERS:

1.	B	2.	B	3.	B	4.	A	5.	B
6.	A	7.	C	8.	B	9.	A	10.	B
11.	B	12.	B	13.	A	14.	C	15.	A
16.	A	17.	A	18.	C	19.	A	20.	A
21.	B	22.	B	23.	C	24.	C	25.	B
26.	D	27.	B	28	D	29	B	30	D
31	A	32.	B	33.	A	34.	A	35.	A
36.	A	37.	B	38.	C	39.	C	40.	A
41.	A	42.	A	43.	A	44.	B	45.	C
46.	C	47.	C	48.	A	49.	A	50.	B
51.	C	52.	C	53.	C	54.	A	55.	A
56.	A	57.	B	58.	D	59.	A	60.	C
61.	A	62.	B	63.	B	64.	A	65.	A
66.	A	67.	B	68.	C	69.	C	70.	B
71.	A	72.	A	73.	C	74.	C	75.	C
76.	C	77.	A	78.	C	79.	A	80.	B
81.	D	82.	C	83.	D	84.	A	85.	D
86.	B	87.	A	88.	B	89.	A	90.	A
91.	B	92.	A	93.	C	94.	C	95.	B
96.	B	97.	A	98.	B	99.	C	100.	C
101.	A	102.	C	10.3	B	104.	B	105.	A
106.	B	107.	D	108.	C	109.	C	110.	C
111.	B	112.	C						

113.	B	114.	C	115.	B
	116. A	117.	D	118.	A
	119. C	120.	B		
121.	B	122.	C		

Write done the correct answer out of the given ones:

1) The algebraic sum of deviations of 8, 1, 6 from the A.M. viz., 5 is
(A) -1
(B) 0
(C) 1
(D) None of these

2) G.M. of 8, 4, 2 is:
(A) 4
(B) 2
(C) 8
(D) None of these

3) Mean of 0.3, 5, 6, 7, 9, 12, 0.2 is:
(A) 4.9
(B) 5.7
(C) 5.6
(D) None of these

4) Mode of 0, 3, 5, 6, 7, 9, 12, 0.2 is:
(A) 6
(B) 0
(C) 3
(D) 5

5) Mode of 40, 50, 30, 20, 25, 35 30, 30, 20, 30 is:
(A) 25
(B) 30
(C) 35
(D) None of these

6) Median of 2, 5, 8, 4, 9, 6, 7 is:
(A) 9
(B) 8
(C) 8
(D) 6

7) Mode of the observations 2, 5, 8, 4, 3, 4, 4, 5, 2, 4, 4 is:
(A) 3
(B) 2
(C) 5
(D) 4

8) For the observations 5, 3, 6, 3, 5, 10, 7, 2 there are ..... modes.
(A) 2
(B) 3
(C) 4
(D) 5

9) Mode of 15, 12, 5, 13, 12, 15, 8, 8, 9, 9, 10, 15 is:
(A) 15
(B) 12
(C) 8
(D) 9

10) Mode of 40, 50, 30, 20, 25, 35, 30, 30, 20, 30 is:
(A) 25
(B) 30
(C) 35
(D) None of these

11) What is the median for the following observations? 5, 8, 6, 9, 11, 4.
(A) 6
(B) 7
(C) 8
(D) None of these

12) If there are 3 observation 15, 20, 25 then the sum of deviation A.M. is:
(A) 0
(B) 5
(C) -5
(D) None of these

13) What if the modal value for the numbers 5, 8, 6, 4, 10, 15, 18, 10?
(A) 10
(B) 6
(C) 18
(D) None of these

14) The harmonic mean for the numbers 3, 4, 5 is:
(A) 2.00
(B) 3.33
(C) 3.83
(D) 4.83

15) The mode of the numbers 7, 7, 7, 9, 10, 11, 11, 11, 12 is:
(A) 11
(B) 12
(C) 7
(D) 7 & 11

16) What is the G.M. for eh numbers 8, 24 and 40?
(A) 24
(B) 12
(C) 8
(D) 10

17) If y = 3x – 100 and = 50, then the value of is:
(A) 60
(B) 30

(C) 100
(D) 50
18) If y = 5x – 20 and = 30, then the value of is:
(A) 130
(B) 140
(C) 30
(D) None of these
19) The median of the numbers 11, 10, 12, 13, 9 is:
(A) 11
(B) 12
(C) 10.5
(D) 12.5
20) The A.M. of 1, 3, 5, 6, x, 10 is 6. the value of x is:
(A) 10
(B) 11
(C) 12
(D) None of these
21) Two variables x and y are given by y = 2x – 3. If the median of x is 20, what is the median of y?
(A) 20
(B) 40

(C) 37
(D) 35
22) If a variable assumes the values 1, 2, 3, 4, 5 with frequencies as 1, 2, 3, 4, 5, then what is the A.M.?
(A)
(B) 5
(C) 4
(D) 4.50
23) If the A.M. and G.M. for two numbers are 6.50 and 6 respectively, then the two numbers are:
(A) 6 and 7
(B) 9 and 4
(C) 10 and 3
(D) 8 and 5.
24) If there are two groups containing 30 and 20 observations and having 50 and 60 as arithmetic means, then the combined arithmetic mean is:
(A) 55
(B) 54
(C) 56
(D) 52
25) What is he H.M. of 1, ½, 1/3, ... 1/n?
(A) n
(B) 2n
(C)
(D)
26) If x and y are related by x-y-10=0
(A) 20
(B) 13
(C) 3
(D) 23
27) And mode of x is known to be 23, then the mode of y is:
(A) 13
(B) 10.70
(C) 11
(D) 11.50
28) If he relationship between two variables u and v are given by 2u+v+7=0 and if the A.M. of u is 10, then the A.M. of v is:
(A) 17
(B) -17
(C) -27
(D) 27
29) An aeroplanes files from A to B at the rate of 500 km/hour and comes back from B to A at the rate of 700 km/hour. The average speed of the aeroplanes is:
(A) 600 km, per hour
(B) 583.33 km. per hour
(C) 100 km per hour
(D) 620 km per hour
30) If the A.M. and G.M. for 10 observations are both 15, then the value of H.M. is
(A) Less than 15

(B) More than 15
(C) 15
(D) Can not be determined.
31) The mean salary for a group of 40 female workers is Rs. 5200 per month and that for a group of 60 male workers is Rs. 6800 per month. What is the combined salary?
(A) Rs. 6160
(B) Rs. 6260
(C) Rs. 6560
(D) Rs. 6760
32) The average salary of a group of unskilled workers is Rs. 10000 and that of a group of skilled workers is Rs. 15,000. if the combined salary is Rs. 12,000 then what is the percentage of skilled workers?
(A) 40%

(B) 50%
(C) 60%
(D) None of these

Write down the correct answers. Each question carries 5 marks.

33) What is the value of mean and median for the following data:

Marks:	5-14	15-24	25-34	35-44	45-54	55-64
No. of Student:	10	18	32	26	14	10

(A) 30 and 28
(B) 29 and 30
(C) 33.68 and 32.94
(D) 34.21 and 33.18

34) The mean and mode for the following frequency distribution

Class Interval:	350-369	370-389	390-409
Frequency:	15	27	31
Class Interval:	410-429	430-449	450-469
Frequency:	19	13	6

Are:
(A) 400 and 390
(B) 400.58 and 390
(C) 400.58 and 394.50
(D) 400 and 394.

35) The third quartile and 65th percentile for the following data:

Profits in '000 Rs:	less than 10	10-19	20-29	30-39	40-49	50-59
No. of firms:	5	18	38	20	9	2

Are:
(A) Rs. 33500 and Rs. 29184
(B) Rs. 33000 and Rs. 28680
(C) Rs. 33600 and Rs. 29000
(D) Rs. 33250 and Rs. 29250

36) Following is an incomplete distribution having modal mark as 44

Mars	0-20	20-40	40-60	60-80	80-100
No. of Students	5	18	?	12	5

What would be the mean marks?
(A) 45
(B) 46
(C) 47
(D) 48

37) The data relating to the daily wage of 20 workers are shown below:
Rs. 50, Rs. 55, Rs. 60, Rs. 58, Rs. 59, Rs. 72, Rs. 65, Rs. 68, Rs. 53 Rs. 50, Rs. 67, Rs. 58, Rs. 63, Rs. 69, Rs. 74, Rs. 63, Rs. 61, Rs. 57, Rs. 62, and Rs. 64.
The employer pays bonus amounting to Rs. 100, Rs. 200, Rs. 300, Rs. 400 and Rs. 500 to the wage earners in the wage groups Rs. 50 and not more than Rs. 55 and not more than Rs. 60 and so on and lastly Rs. 70 and not more than Rs. 75, during the festive month of October.

What is the average bonus paid per wage earner?
(A) Rs. 200
(B) Rs. 250
(C) Rs. 285
(D) Rs. 270

38) What is the value of the first quartile for observations 15,18, 10, 20, 23, 28, 12, 16?
(A) 17
(B) 16
(C) 12.75
(D) 12

39) If the A.M and H.M for two numbers are 5 and 3.2 respectively then the G.M. will be:
(A) 16.00
(B) 4.10
(C) 4.05
(D) 4.00

40) If there are two groups with 75 and 65 s harmonic means and containing 15 and 13 observation, then the combined H.M is given by:
(A) 65
(B) 70.36
(C) 70
(D) 71

41) If G.M of x is 10 and G.M of y is 15 then the G.M of xy is
(A) 150
(B) Log 10 x log 15
(C) Log 150
(D) None of these

42) The G.M of 4, 6 and 8 is:
(A) 4.77
(B) 5.77
(C) 6.21
(D) 6.77

ANSWERS:

1.	B	2.	A	3.	B
	4.	B	5.	B	6.
	D	7.	D	8.	A
9.	A	10.	B	11.	B
	12.	A	13.	A	14.
	C	15.	D	16.	C
17.	D	18.	A	19.	A
	20.	B	21.	C	22.
	A	23.	B	24.	B
25.	C	26.	B	27.	B
	28	C	29	B	30
	C	31	A	32.	A
33.	C	34.	C	35.	A
	36.	D	37.	D	38.
	C	39.	D	40.	C
41.	A	42.	B		