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**DEPARTMENT OF BBA[CA]**

Question Bank

Name of Subject – BUSINESS STAT

**Q.1)Fill in the blanks.**

1) The degree to which numerical data tend to spread about an average

 value is called the \_\_\_\_\_.

2) X means \_\_\_\_\_\_\_.

3) Classification method in which upper limit of interval is same as of

 Lower limit class interval is called \_\_\_\_\_\_\_\_.

4) Summary and Presentation of data in tabular form with several nonoverlapping

 classes is referred as \_\_\_\_\_\_\_.

5) \_\_\_\_\_ diagrams are graphs of the data that are helpful in displaying

 the relationship between variables.

6) \_\_\_\_\_\_ makes clear presentation of data.

7) \_\_\_\_\_\_\_\_ is a value which is typical or representative of a set of

 data.

8) \_\_\_\_\_ is a statistical tool used to measure the relationship between

 two sets of variables.

9) \_\_\_\_\_\_\_ is the simplest absolute measure of dispersion which shows

 the difference between the highest and the lowest value in a series.

**Q.2) Solve the following**

1) Marks :10 20 30 40 50

 No. of Students : 8 10 20 15 7.Computer Arithmetic Mean

2) Calculate the S.D. and C.V. from the following :

 14, 8, 11, 10, 13, 16, 5, 9, 12, 2

3) Calculate coefficient of correlation for the following data :

 X : 2 3 4 5 6 7 8

 Y : 4 7 8 9 10 14 18

4) Compute the mode from the following data :

 Size: 2 3 4 5 6 7 8 9 10 11 12 13

 Frequency : 3 8 10 12 16 14 10 8 17 5 4 1

5) Calculate Range and its coefficient from the following data :

 53, 46, 18, 16, 75, 84 and 28

6) Use a bar diagram to represent the following data :

 Year : 1983 1984 1985 1986 1987

 Profit: 2.5 2.0 1.0 2.8 3.0

7) Arithmetic mean of 50 items is 104. While checking it was noticed that

 observation 98 was misread as 89. Find the correct value of mean.

8) Computer the quartile deviation and its coefficient from the following

 data :100, 24, 14, 105,21, 35,106, 16,100, 72, 68, 103, 61, 90, 20

9) find correlation coefficient between X and Y, given that : *n* = 25 *x* = 75,

*y* = 100, *x*2 = 250, *y*2 = 500, *xy* = 325

10) Find Median for the following data :

 Wages (in <) : 30-40 40-50 50-60 60-70 70-80 80-90 90-100

 No. of Persons: 1 3 11 21 43 32 9

11) Explain the Degree (strength) of correlation

12) Define statistics. Explain the scope of statistics.

13) Find the mid-point and width of each class given the classes below 10,

 10-20, 20-40, 40-60, 60-70 above 70

14) Draw a histogram to represent the following frequency distribution

 Size of forms : 0-20 20-40 40-60 60-80 80-100

 No. of forms : 12 38 16 5 3

15) Write a note on Scatter Diagram.

16) Which worker appears to be more consistent in the time he requires

 to complete the job? Why?

17) Which worker is faster in completing the job? Why?

18) Explain the different parts of statistical table

19) From the data given below, find the regression equations :

 i) Y on X

 ii) X on Y

 Marks(Economics): 25 28 35 32 31 36 29 38 34 32

 Marks (Statistics): 43 46 49 41 36 32 31 30 33 39

20) Calculate mean, median and mode from the following data :

 Monthly salary : 400 600 800 1000 1200 1400 1600

 No. of Workers : 0 4 14 33 45 49 50

21) Write meaning and definition of statistics. Explain the importance of

 statistics.

22) Calculate combined mean for the following data :

 N1 = 50 N2 = 40

 1 X = 63 2 X = 54

23) Find standard deviation : 8, 10, 15, 24, 28.

24) Prepare Histogram from the following data :

 X : 5 10 15 20 25

 f : 10 20 30 10 05

25) The coefficient of correlation between two variable X, Y is 0.6. Their

 covariance is 18. The variance of X is 25. Find variance of Y series.

26) From the following data calculate Quartile Deviation X = 4, 9, 14, 19, 24,

 29, 34, 39, 44, 49 and 54.

27)Explain the properties of Karl Pearson's coefficient of correlation.

28) Calculate Mean, Median and Mode for :

 12, 13, 15, 12, 17, 12, 13

29) The following is the distribution of height of students in a class of

 secondary school.

 Height in cm : 130-134 135-139 140-144 145-149 150-154 155-159

 No. of students : 5 15 28 24 17 11

 i ) State the type of classification.

 ii) Find the class mark of 3rd class.

 iii) How many students have height less than 145 cm?

 iv) How many students have more than 150 cm height?

30)What is the meaning of classification? Define its various types.

31) Construct the frequency distribution table for the data on weights (in kg)

 of 20 students of a class using intervals 30-35, 35-40, and so on

 40, 38, 33, 48, 60, 53, 31, 46, 34, 36, 49, 41, 55, 49, 65, 42, 44, 47, 48,

 39.

32) Find average wages of 10 workers :

 Daily wage : 4 6 10 11 14 Total

 No. of workers : 2 1 4 2 1 10

33) Find median for average life of a particular brand of T.V. sets from the

 following data :

 Life in years : 0-5 5-10 10-15 15-20 20-25 25-30 30-35 35-40

 No. of sets : 2 16 26 39 43 21 8 4

34) Calculate coefficient of variation of the following data :

 Weekly Rent : 400 700 800 950 1000 1200 1450

 No. of Persons

 Paying the Rent : 11 13 34 39 18 8 2

35) Find combined standard deviation :

 Group I - 1 X = 2100 n1 = 100 1 = 10

 Group II - 2 X = 1500 n2 = 200 2 = 12

36) Explain the methods of calculation of Arithmetic mean.

37) The following information is given to find the two regression lines

 i) Y on X

 ii) X on Y

 X=10,Y=90, *sx* =3 *sy*=12 and = 0.8.

38) Calculate Karl Pearson's coefficient of correlation for the following data :

 X : 4 7 11 14 19 15

 Y : 18 16 17 19 19 21

39) Draw the less than and greater than Ogives for the following data :

 Class Interval Frequency

 20-30 04

 30-40 06

 40-50 13

 50-60 25

 60-70 32

 70-80 19

 80-90 o8

 90-100 03

40) From the data given below, find the regression equations :

 Marks : 25 28 35 32 31 36 29 38 34 32

 (Economics)

 Marks : 43 46 49 41 36 32 31 30 33 39