Question Bank

Paper - Statistics

Semester-3/CC-1

Questions in right hand indicates marks.

Part-1 **[1 marks]**

Q.A -Fill in the blanks.

1. Statistic means _____ description to most people.

2. The term statistics has its origin in latin word_____.

3. _____ data is collected by investigation for his own purpose.

4. _____ data are those which are already in existence.

5. In _____ series every class interval excludes items corresponding to its upper limits.

6. what is primary data ?

7. What is secondary data?

8. _____ is the formula of direct method in individual series for calculating AM.

9. In _____ method of data collection 100 percent of the population of is inspected.

10. The difference between the maximum and the minimum observation of the distribution is _____.

11. _____ is that value of the variable which devides the group into equal parts.

12. The formula used for calculating median in individual series is _____.

13. The formula used for calculating median in discrete series is _____.

14. Quartiles divide a series into _____ equal parts.

15. deciles divide a series into _____ equal parts.

17. Percentiles divide a series into _____ equal parts.

18. Find the mode from the following data

8,10,5,8,12,7,8,9,11,7

19. _____ is the value which has the greatest frequency density.

20. write the empirical formula.

21. mode = _____ median -_____ mean.

22. Geometric mean is a _____ average.

23. Geometric mean is the _____ of the product of the two items.

24. The formula used for calculating geometric mean in continous series is _____.

25. The Harmonic mean is a _____ average.

26. _____ is a measure of the variations of the items.

27. _____ is the difference between the largest and smallest value in the series.

28. coefficient of range is _____.

29. Mean deviation is known as _____ deviation.

30. standard deviation was first used by _____.

31. _____ is known as root mean square deviation.

32. _____ is a set of vertical bars whose areas are proportional to the frequencies represented.

33. S.D can be calculated from _____.

34. There are _____ methods of collecting primary data.

35. Formula of variance is_____.

36. when a series is not symmetrical is said to be _____.

37. The value of karl pearson's coefficient of skewness usually lies between _____.

38. A curve having a high peak than the normal curve is called _____.

40. Average is called _____ because they help to locate the center or data.

41. _____ value obtained by dividing the sum of value by their number.

42. Arithmetic mean is _____ change of origin and scale of measurement .

43. The sum of square of deviation is least when measured from _____.

44. The distribution will be _____ when mean ,median and mode are equal.

45. In a straight line equation y= a+bx ,a is the _____.

46. When the production of things is maximum ,this stage is called _____.

47. There are _____ components of time series.

48. The basic tendency of a series to grow or decline over a period of time is called _____.

49. If all the values are of equal importance the index numbers are called.

50. Base period for an index number should be _____ year.

51. When a coin and a die are thrown, the number of all possible cases is _____.

52. Probability of drowing a spade queen from a well suffled pack of card is _____.

53. The probability of drowing a king from a pack of 52 cards is _____.

54. Probability is the ratio of _____ and _____.

55. Regression coefficient is independent of _____.

56. GM of the two regression coefficient b_{yx} and b_{xy} is equal to _____.

57.The lines of regression intersect at the point _____.

58. If the coefficient of determination is equal to 1 ,then the correlation coefficient is _____.

Unit-II [2 marks]

1. What is meant by statistics ?
2. What is primary data ?
3. Write down two methods of collecting secondary data ?
4. Write down two main objectives of classification of data ?
5. Write down different methods of classication of data ?
6. What is frequency polygon?
7. Write different methods of classification of classification of data ?
8. Explain the advantages of classification of data ?
9. What is frequency distribution ?
10. Write down different types of diagrams ?
11. What is bar diagram ?
12. What is pie diagram ?
13. What is histogram ?
14. What is frequency polygon ?
15. What is cumulative frequency curve or ogive ?
16. What is meant by average or central tendency ?
17. Write the purpose or functions of average ?
18. Write two characteristics of a good average ?

19. Write down different types of average ?
20. Defined Arithmetic mean ?
21. Defined median ?
22. Defined mode ?
23. Defined Geometric mean ?
24. Defined Harmonic mean ?
25. Write deciles and percentiles ?
26. Write two objectives of dispersion ?
27. What is meant by standard deviation ?
28. What is Lorenz curve ?
29. What is meant by skewness ?
30. Write down difference types of Kurtosis ?
31. Write two difference between skewness and kurtosis ?
32. What is scatter diagram method ?
33. What is variance ?
34. What is co-variance ?
35. Write down two assumption of karl pearson's coefficient of correlation ?
36. Write two merits of rank correlation ?
37. Write down the two regression lines ?
38. What is meant by time series ?
39. Write down two utility of time series ?
40. Defined secular trend ?
41. Defined seasonal variation ?
42. Defined cyclical variation ?
43. Defined irregular variation ?
44. Explain additive model of time series ?
45. What is free hand curve method ?
46. What is semi – average method ?
47. What is moving averge method ?
48. What is least square method ?
49. Writes two merits of least square method ?
50. Defined an experiment with an example ?
51. Defined equally likely events with an example ?
52. Defined mutually exclusive events with an example ?
53. Define value of index number ?
54. What is Quantity index number ?
55. What is time reversal test ?
56. What is factor reversal test ?
57. What is circular test ?
58. What is unit test ?
59. What is meant by probability scale ?
60. Define addition theorm of probability?
61. Define multiplication theorm of probability ?
62. What is conditional probability

63. Write down two types of probability distribution ?

UNIT-III **[3 Marks]**

1. Distinguish between primary data and secondary data ?
2. Explain the three methods that are used in the collection of primary data ?
3. Explain the three merits and demerits of direct personal investigation ?
4. Discuss various method of classification ?
5. Explain the three types of continous series?
6. Explain different types of bar diagram that are used in presenting statistical data ?
7. What do you mean by pie diagram ? explains the steps involved in its construction ?
8. What are the three different types of frequency distribution and graphs?
9. What is histogram ? Explain its different types?
10. What is frequency polygon ?
11. What is multiple bar diagram ?
12. What is frequency distribution ?
13. What do you meant by measures of central tendency ? Explain its types ?W\
14. What is range ? Explain its merits ?
15. Explain the demerits of range ?
16. Distinguish between variance and coefficient of variance ?
17. What do you understand by standard deviation ? Explain its important properties?
18. What is kurtosis ? Discuss about its types?
19. What is significance of studying correlation ?
20. Defined rank correlation coefficient ? How is it measured ?
21. What is probable error and its utility?
22. Explain the properties of correlation coefficient ?
23. What is meant by partial correlation ?
24. What is meant by multiple correlation ?
25. Distinguish between correlation and regession ?
26. Defined the standard error of estimate ? How it is computed?
27. Explain the uses and limitations of index number ?
28. Explain merit and demerits of cyclical fluctuations ?
29. What is need for analysis of time series ?
30. Explain merits and demertits of secular trend ?
31. Distinguish between seasonal and cyclical fluctuations with suitable examples?
32. What is circular test ?
33. Write short notes of budget method ?
34. Distinguished between time reversal and factor reversal tests?
35. What is mutually exclusive events ?
36. What is empirical and relative frequency definition ?
37. What is addition theorem ?
38. What is multiplication theorem ?
39. What is sample method ?
40. What is census method ?

UNIT-III **[7 Marks]**

1. Explain the characteristics of good average ?
2. Defined AM and explain its merits and demerits ?
3. Defined median and explain its merits and demerits ?
4. What is mode ? Explain its merits and demerits ?
5. Defined geometric mean and explain its advantages and disadvantages ?
6. What is harmonic mean ? defines its merits and demerits ?
7. Prove that AM $\geq GM \geq HM$?
8. Defined dispersion and explain different measures of dispersion show which one you prefer best ?
9. Discuss with suitable example the use of range as a measured dispersion ?
10. Defined mean deviation and explain its relative merits and demerits?
11. What is kurtosis ? explain how it is measured?
12. Defined coefficient of correlation and explain the situation where coefficient of correlation is +1 , -1 and 0
13. Bringout a distinction between correlation and regression ?
14. Explain why fishers index number is called ideal index number ?
15. What is consumer price index number ? Explain how it can be constructed?
16. Explain different methods of collecting data?
17. Explain different types of sampling?
18. What is probability ? describe the various theories of probability ?