Roll No. | | | | | | | | | | | |

Total No. of Pages: 02
Total No. of Questions: 09

BBA (Sem.-3rd)

BUSINESS STATISTICS

Subject Code: BBA-304
Paper ID: [C1167]

Time: 3 Hrs. **Max. Marks: 60**

INSTRUCTIONS TO CANDIDATE:

1. **Section-A is compulsory.**
2. **Attempt any one question from Unit I, II, III, IV**

SECTION-A (10x2=20)

Q. 1. (a) Difference between questionnaire and schedule.

(b) Secondary data

(c) Mutually exclusive events.

(d) Mean of 50 terms was calculated as 30.2. Later on it was known that without increasing the number of terms, one term with the value of 36 was included twice. Find correct mean.

(e) Explain chain base index numbers.

(f) Mean deviation

(g) Calculate median 2, 7, 9, 11, 5, 6, 12, 3, 7, 8

(h) Define Average

(i) Write the characteristics of a good measure of Dispersion.

(j) From a pack of 52 cards two cards are drawn at random, find probability of getting a queen of black colour.

Unit-I

Q. 2. First and third Quartile of Data are 12.5 and 25 for the following series. Find missing frequencies=72 **(10)**

Class Intervals	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40
Frequency	4	8	?	19	?	10	5	?

Q. 3. "Despite many drawbacks standard deviation is the best measure of dispersion" Discuss?

Unit-II

(10)

Q. 4. Two random variables have regression equation as **(10)**

3x-2y-26=0 and 6x+y-31=0

Calculate mean values and correlation coefficient. If variance of X is 25 find standard deviation of Y.

Q. 5. **(a)** Briefly explain diagrammatic and graphic method of studying correlation. **(10)**

(b) Explain

(i) Coefficient of determination

(ii) Coefficient of alienation

Unit-III

Q. 6. Calculate the trend values by least square method and predict the sales for 1982 taking 1976 as base year. **(10)**

Years	1973	1974	1975	1976	1977	1978	1979
Sales (crores)	20	23	22	25	26	29	30

Q. 7. "Fisher's ideal index number is a compromise between the two well known indices – not a right compromise, economically speaking". Discuss. **(10)**

Unit-IV

Q. 8. The distribution of typing mistakes committed by a typist is: **(10)**

Mistakes (per page)	0	1	2	3	4	5
No. Of pages	14	14	39	27	5	1

Fit a poisson distribution.

Q. 9. **(a)** There are 4 red and 5 green balls in a bag. If two balls are drawn one after the other at random without replacement, what is the probability that first one is red and second one is green ball? **(10)**

(b) Write a note on:

(i) Addition theorem of probability

(ii) Multiplication theorem of probability.

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