21BBA3C9SB

BBA III Semester Degree Examination, March/April - 2023
MANAGEMENT
Statistics for Business Decisions
(NEP)

Time : 2 Hours   Maximum Marks : 60

SECTION - A

1. Answer the following sub-questions. Each carries **one** mark.   **10x1=10**

    (a) What is exclusive Class Interval ?

    (b) Give the meaning of tabulation.

    (c) What is Skewness ?

    (d) What do you mean by dispersion ?

    (e) Name any two types of correlation.

    (f) What are the "Regression Lines" ?

    (g) What do you mean by "Least Squares Method" ?

    (h) Define the term Time Series.

    (i) What is Base year ?

    (j) What do you mean by Consumer Price Index ?

SECTION - B

Answer **any four** of the following questions. Each question carries **five** marks. **4x5=20**

2. What is classification ? Briefly explain the types or methods of classification of data.

3. The mean height of 25 Male workers in a factory is 61cms and the mean height of 35 Female workers in the same factory is 58 cms. Find the combined mean height of all the workers in the factory.

4. Find out Karl Pearson's co-efficient of co-rrelation from the following information.
    (a) Sum of Products of x and y 30
    (b) No. of items [N]   20
    (c) Standard deviation of x series 1.5
    (d) Standard deviation of y series 1.4

5. Explain in brief the components of Time Series.

6. From the follwoing data construct an Index for 2021 taking 2020 as base year by the average price relating Index method.

Commodity	Price in 2020	Price in 2021
P	180	195
Q	150	160
R	190	220
S	130	175

7. Calculate the standard deviation from the given Values :
Values : 18, 12, 15, 16, 28, 22, 29

SECTION - C

Answer **any three** of the following questions. Each question carries **ten** marks.

3x10=30

8. Construct a pie diagram for the following data :

Specialisation	No. of Graduates
Finance and Accounting	45
Marketing	30
Information Technology	10
Human Resources	25
Taxation Laws	10

9. Calculate mean deviation from median with the help of following data.

Size	Frequency
0 - 10	02
10 - 20	10
20 - 30	20
30 - 40	15
40 - 50	10
50 - 60	03

10. The Following Table gives the ages of husband and wives at the time of their marriage. Calculate the correlation coefficient between the ages of husband and wives.

Age of husband \ Age of wives	30 - 40	40 - 50	50 - 60	60 - 70
30 - 40	20	26	-	-
40 - 50	8	14	37	-
50 - 60	-	4	18	3
60 - 70	-	-	4	6

11. Compute the "Straight Line Trend" Equation by the method of Least Squares for the following data relating to sales of Cars.

Year	Cars Sold (in '000')
2014	20
2015	24
2016	22
2017	30
2018	28
2019	32
2020	30

Also calculate the Trend value for the year 2022.

12. Construct Fisher's Ideal Index for the following data.

Commodity	2016		2017	
	Price	Quantity	Price	Quantity
A	12	100	20	112
B	4	200	04	240
C	8	120	12	120
D	20	60	24	48
E	16	80	24	72

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