21BBA3C9SB



B.B.A III Semester Degree Examination, April/May - 2024 MANAGEMENT

DSC 9: Statistics for Business Decisions (NEP)

Time: 2 Hours Maximum Marks: 60

Note: Answer **all** sections.

SECTION - A

1. Answer **all** the questions.

10x1=10

- (a) Define Statistics.
- (b) What do you mean by primary data?
- (c) Give the formula for calculating Arithmetic mean in Discrete Series.
- (d) Define Tabulation.
- (e) State the types of Sampling.
- (f) What is Regression?
- (g) What is meant by Trend value?
- (h) What do you mean by Cost of Living index number?
- (i) State the types of Correlation.
- (j) Write the meaning of Mode.

SECTION - B

Answer **any four** of the following questions. Each question carries **five** marks.

4x5 = 20

- **2.** Explain in brief the objectives of Statistics.
- 3. Present the data in a Tabular Form

Male 55%

Male non-coffee drinkers were 30%

Female coffee drinkers were 15%

4. Explain the difference between classification and Tabulation.



5. Present the data in a Percentage Bar diagram.

Years	Men	Women	Children
2021	45%	35%	20%
2022	44%	34%	22%
2023	48%	36%	16%

- **6.** If r = 0.6 and N = 64 of a distribution. Find out the Probable error.
- 7. Calculate the Standard Deviation from the given data:

Age (in years): 23, 27, 28, 29, 30, 31, 33, 35, 36, 38

SECTION - C

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

3x10=30

8. Compute Mean, Median and Mode for the following data.

Class Interval: 0-10 10-20 20-30 30-40 40-50 50-60

Frequency: 14 23 35 20 8 5

9. Calculate Karl Pearson's Coefficient of correlation for the following data regarding price and demand of a certain commodity.

Price (in ₹): 21 22 23 24 25 26 27 28 29

Demand (in 000 units): 20 19 19 17 17 16 16 15 14

10. Fit a straight line trend by the method of least squares for the following data relating to production of Rice.

Year: 2013 2014 2015 2016 2017 2018 2019 Production: 80 90 92 83 94 99 92 (000 tons)

Also calculate the trend values for the year 2022.



11. Construct Fischer's Ideal Index Numbers from the given data :

Items	Price		Quantity	
	2018	2019	2018	2019
A	16	40	100	120
В	4	12	30	20
С	2	4	40	50
D	4	10	20	16
E	2	10	80	60

- 12. Construct the cost of living index number for the following data by using:
 - (a) Aggregate Expenditure Method
 - (b) Family Budget Method

Commodities	Unit	Quantity Consumed	Price per unit	
		in 2017	2017	2018
A	Quintal	5 Quintal	1200	1800
В	Kg	25 Kgs	20	25
С	Litre	20 Litres	20	30
D	Meter	25 Meters	50	45
E	Unit	20 Units	100	200

