207267

SDCBB-204

II Semester B.B.A. Degree Examination, June / July - 2026
(SEP Scheme 2024-2025 Onwards Freshers)
BUSINESS ADMINISTRATION
Business Statistics and Logic
Paper - BBA-2.6

NEW HORIZON COLLEGE LIBRARY KASTURINAGAR BANGALORE-43

Time : 3 Hours **Maximum Marks : 80**

Instructions **:**

All answers should be written in only English.

SECTION - A

Answer any Five sub-questions. Each sub-question carries 2 marks. (5×2=10)

1. a) What is Statistics?

b) Mention any two parts of a statistical table.

c) What do you mean by measure of dispersion?

d) What is mean deviation?

e) Define regression.

f) What is an index number?

g) Find the next number 13, 17, 19, 23, 29,?

SECTION - B

Answer any Three questions. Each question carries 6 marks. (3×6=18)

2. Present the below data in a Tabular Form;

A survey showed that Tea drinking habits in Two Cities provided the following information;

City X : Females were 40%, Total Tea drinkers were 45% and Male Non-tea drinkers were 20%.

City Z : Males were 55%, Male Non-tea drinkers were 30% and Female Tea drinkers were 15%.

3. Calculate the rank correlation coefficient of the data given below:

Rank in Sports	1	2	3	4	5	6
Rank in Studies	4	5	6	2	1	3

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4. Calculate Consumer Price Index from the following data:

Commodity	P_0	P_1	W
A	2	4	2
B	4	6	4
C	6	6	3
D	2	3	1
E	1	1	1

5. The number of employees, wages per employee and the variance of the wages per employees for two factories are given below:

	Factory A	Factory B
No. of Employees	50	100
Average wages per employee per month	Rs. 120	Rs. 85
Variance of wages per employee per month	Rs. 9	Rs. 16

In which factory is there greater variation in the distribution of wages per employee. Which factory pays more wages?

6. a) Ajay walks 24km towards East and turns to right hand side and takes a drive of another 10km. He then turning to his right (drives towards West) another 10km. He then turns to his left and walks another 8km. After that, he turns to right and travels 14km. How far is he from his initial point and in which direction?

b) A, P, R, X, S and Z are sitting in a row. S and Z are in the centre. A and P are at the ends. R is sitting to the left of A. Who is to the right of P?

SECTION - C

Answer any Three questions. Each question carries 14 marks. **(3×14=42)**

7. Calculate Karl Pearson's coefficient of correlation for the following data and interpret the results.

X	:	63	52	59	57	64	65	55	56	59	58
Y	:	126	125	117	113	130	129	110	113	116	112

8. Calculate Mean, Median and Mode from the following data:

Marks	:	0-10	10-20	20-30	30-40	40-50	50-60
No. of Students	:	6	6	12	38	40	40
		60-70	70-80	80-90	90-100		
		36	12	6	4		

9. From the following Price and quantity of the base year and current year, determine the Fisher's ideal index and show how it satisfies the TRT and FRT.

	2020		2025	
Commodities	**Price**	**Quantity**	**Price**	**Quantity**
A	21	15	20	17
B	70	10	75	12
C	60	14	62	15
D	32	10	30	10
E	36	12	38	8

10. Following are the figures of production (in thousands) of sugar factory:

Year :	2019	2020	2021	2022	2023	2024	2025
Production :	77	81	88	94	94	96	98

You are required:

a) Fit a straight line trend using least square method.

b) Estimate the production for the year 2027.

11. The following table gives the relative values of two variables *X* and *Y*:

X :	43	44	46	40	44	42	45	42	38	40
Y :	29	31	19	18	19	27	27	29	41	30

Obtain the two regression equations.

Also estimate the most likely value of *X* when *Y* is 25 and the most likely value of *Y* when *X* is 40.

SECTION - D

Answer any One question which carries 10 marks. **(1×10=10)**

12. a) Construct a Histogram from the following and locate the mode graphically. Verify the results.

Marks :	0-10	10-20	20-30	30-40	40-50
No. of Students :	10	30	80	64	56

(OR)

b) Draw the ogive curves from the following data, and locate median value.

Marks :	20-40	40-60	60-80	80-100	100-120	120-140	140-160
No. of Students :	4	6	10	16	12	7	3