DCBC302

Reg. No. | | | | | | | | |

III Semester B.Com.(Regular/ LSCM/I & AS) Degree Examination,
January/February - 2025
COMMERCE
Business Statistics
(NEP Scheme Freshers and Repeaters 2022-23 Onwards)
Paper : 3.2

Time : 2½ Hours **Maximum Marks : 60**

Instructions to Candidates:

Answers should be written completely in English only.

SECTION - A

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

1. a) Define Statistics.

b) The following are the wages of 8 workers of a factory. Find out the co-efficient of range.

Wages (Rs.):	1400	1450	1520	1380	1485	1495	1575	1675

c) Give the meaning of Positive Correlation.

d) If $\bar{X} = 09$, $Z = 11$ find Median.

e) Find out the Probable Error, if $r = 0.325$, $N = 1800$.

f) Find the co-efficient of Variation, if Mean = 11.76 and SD is 1.47.

g) What do you mean by Regression Lines?

SECTION - B

Answer any **FOUR** questions. Each question carries **5** marks. **(4×5=20)**

2. From the following data, obtain two regression equations.
$\bar{X} = 20$, $\bar{Y} = 12$, SD of $x = 5$, SD of $y = 25$ and $r = 0.8$.

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3. Calculate the Mode from the following data:

Marks:	100-110	110-120	120-130	130-140	140-150	150-160	160-170	170-180
No. of Students:	10	24	64	80	40	20	18	22

4. Calculate the Quartile Deviation and Co-efficient of Quartile Deviation from the following data:

Roll No:	1	2	3	4	5	6	7
Marks:	24	30	40	56	60	80	100

5. Calculate Co-efficient of Correlation from the following data and obtain the probable error $\Sigma xy = 230$, $\Sigma x^2 = 1092$ and $\Sigma y^2 = 64$.

6. The total marks scored by two students Sathya and Vidhya in 5 subjects are 460 and 480 with standard deviation of 4.6 and 2.4 respectively. Who is more consistent in performance? Give reasons.

SECTION - C

Answer any **TWO** questions. Each question carries **12** marks. **(2×12=24)**

7. Find the Mean, Median and Mode from the following data:

Mid Values:	5	15	25	35	45	55	65	75	85
Frequency:	4	2	18	21	22	19	10	3	1

8. Calculate the standard deviation and coefficient of variation from the following data.

Marks:	50	60	70	80	90	100	110	120
No. of students:	4	3	5	2	3	4	2	1

9. Find the Karl Pearson's Coefficient of Correlation from the following data.

Wages (Rs.)	100	101	102	102	100	99	97	98	96	95
Cost of Living (Rs.)	98	99	99	97	95	92	95	94	90	91

SECTION - D

Answer any **ONE** question. Which carries **6** marks. **(1×6=6)**

10. The production of Rice for five consecutive years is shown below. Draw bar diagram.

Year:	2018	2019	2020	2021	2022
Production (Tons):	15	16	19	24	18

11. Draw a blank table and mention the parts of table.