Reg No:...... K24FY1307 (B) Name :.....

## First Semester FYUGP Management Studies Examination NOVEMBER 2024 (2024 Admission onwards) KU1DSCBBA102 (BUSINESS STATISTICS)

(DATE OF EXAM: 4-12-2024)

Maximum Marks: 70 Time: 120 min Part A (Answer any 6 questions. Each carries 3 marks) 1. Define Geometric Mean 3 2. Define Harmonic Mean 3 3. Define Cyclical Variations 3 4. Explain the method of Least Squares 3 5. What is Line of Best Fit? 3 6. Mention the uses of Correlation 3 7. What is meant by Perfect Correlation? 3 3 8. What are Dependent and Independent variables Part B (Answer any 4 questions. Each carries 6 marks) 9. What is the purpose of Time Series analysis? 6 10. What are the limitations of Time Series Analysis? 6 11. Find the trend equation from the following information: n = 8,  $\sum y = 47.8$ ,  $\sum x = -12$ ,  $\sum x^2 = 60$ ,  $\sum xy = 67.4$ 6

12. Find out the Coefficient of Correlation between X & Y:

$\mathbf{X}$	$\mathbf{Y}$
10	15
12	10
8	6
15	25
20	16
25	12
40	8

13.	What	is	Regression	Line?	Explain	its	uses.
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6

14. By using the following information, obtain the two regression equations:

X	Y
15	10
18	11
26	16
28	19
31	17
25	14
19	11
35	24

6

## Part C (Answer any 2 question(s). Each carries 14 marks)

- 15. What are the sources of collecting Secondary data? Explain the advantages and disadvantages of using Secondary data 14
- 16. What is frequency distribution? Give the steps in construction of frequency distribution 14
- 17. Calculate the Standard Deviation (SD) regarding the age distribution of 542 members of Parliament:

Age (Years)	Frequency
20 - 30	3
30 - 40	61
40 - 50	132
50 - 60	153
60 - 70	140
70 - 80	51
80 - 90	2

14