

Reg No:.....  
Name :.....

K24FY1307 (B)

**First Semester FYUGP Management Studies Examination**  
**NOVEMBER 2024 (2024 Admission onwards)**  
**KU1DSCBBA102 (BUSINESS STATISTICS)**  
(DATE OF EXAM: 4-12-2024)

Time : 120 min

Maximum Marks : 70

**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
8. What are Dependent and Independent variables 3

**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:

$$n = 8, \quad \sum y = 47.8, \quad \sum x = -12, \quad \sum x^2 = 60, \quad \sum xy = 67.4$$

6

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

X	Y
10	15
12	10
8	6
15	25
20	16
25	12
40	8

6

1

13. What is Regression Line? Explain its uses.

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