



**Avinashilingam Institute for Home Science and Higher Education for Women**

Deemed to be University Estd.u/s 3of UGC Act 1956, Category A by MHRD [now MoE]

Re-accredited with an A++ Grade by NAAC CGPA 3.65/4, Category I by UGC

Coimbatore-641043, Tamil Nadu, India

**Continuous Internal Assessment Test - II April 2025**

**II Semester**

**Class : I UG**

**Major : BBA**

**Time : 2 Hours**

**Max. Marks : 60**

**24BBAC05 Business Statistics and Logic**

**Course Outcomes:**

CO1: Enhance Knowledge on the concept of statistics and the way of mobilizing data

CO2: Gain knowledge on the various methods of presenting data

CO3: Acquire skills in calculating basic statistical parameters independently

CO4: Assess the way of measuring the inter-relationship among variables

CO5 Interpret the calculated statistical indicators based on the acquired knowledge

**Part A**

**6 x 1 = 6**

**Choose the Correct Answer**

1. Regression analysis became most popular in the period of CO4K2  
 a. Marshall      b. Galton      c. Roman      d. Bowley Product
2. Given a series 50,45,40 135,30, ? Find what number would come in place of the question mark (?) CO5K1  
 a. 28      b. 15      c. 25      d. 20
3. In a certain code" MISSIONS in written as "AMSIISNOS". How is "online" written in that code CO4K4  
 a. OLNNIE      b. ONILENC      c. NOILEN      d. ONNLIE
4. Measures of Central Tendency and Dispersion CO5K4  
 a. Mean, Median, Mode, Mean Deviation  
 b. Quartiles and Quartile Deviation  
 c. Standard Deviation  
 d. Co-efficient of Variation, Coefficient of Quartile Deviation
5. Correlation and Regression are known as CO4K4  
 a. Scatter diagram  
 b. Karl Pearson's Coefficient of Correlation  
 c. Rank Correlation  
 d. Regression lines, Regression equations, Regression coefficients
6. Time Series Analysis – basic application including Moving Average CO3K1  
 a. Moving Average Method      b. Method of Least Squares  
 c. Quartiles and Quartile Deviation      d. Standard Deviation

**Part B**

**3 x 6 = 18**

**Answer ALL questions**

**Each answer should not exceed 400 words or two pages**

7. a. Distinguish between the correlation Differ and Regression. CO4K4  
 (or)
- 7.b. Explain the Time Series with examples. CO3K2
- 8.a. Explain the advantages of Time Series Analysis. CO4K2  
 (or)
- 8.b. Draw less than arch More than 0 gives from the following? CO4K4

Marks	STUDENTS
10-20	6
20-30	10
30-40	15
40-50	30
50-60	35
60-70	20
70-80	17
80-90	10
90-100	7

9.a. Draw a trend line by the method of Semi Average

CO5K2

<b>AVERAGE YEAR</b>	1987	1988	1989	1990	1991	1992	1993
<b>PRODUCTION (in tonnes)</b>	90	110	130	150	100	150	200

(or)

9.b. Construct a Ratio Chart

CO4K3

<b>AVERAGE YEAR</b>	1990	1991	1992	1993	1994	1995	1996
<b>PRODUCTION (in units)</b>	600	1100	1800	2600	3500	4800	6000

**Part C**

**3 x 12 = 36**

**Answer ALL questions**

**Each answer should not exceed 800 words or four pages**

10.a. Define Regression. State the advantages of Regression.

CO4K4

(or)

10.b. Find out the trend values by the methods of least squares

CO3K4

<b>YEAR</b>	2010	2011	2012	2013	2014
<b>PRODUCTION</b>	830	920	710	900	900

11.a. Find out the Regression Equation.

CO4K5

<b>X</b>	8	14	22	26	30
<b>Y</b>	2	6	4	7	11

(or)

11.b. Write short note on Utility of Time Series.

CO4K5

12.a. What is Regression Line? Write the equation of Regression Line?

CO4K3

(or)

12.b. Fit a straight-line trend equation to the following data by the method of least squares and estimate the value of sales for the year 1985

CO5K4

<b>YEAR</b>	1979	1980	1981	1982	1983
<b>SALES (in Rs)</b>	100	120	140	160	1080