Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University Estd. u/s 3 of UGC Act 1956, Category A by MHRD)
Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC
Coimbatore - 641 043, Tamil Nadu, India

Continuous Internal Assessment- II (October,2025)

Class: II UG **Time:2 Hours**

Major: CS/BC/BT **Max.Marks:60**

25BECGE5 – Data Analysis with Excel/ SPSS/ R/ Python

Course Outcomes:

CO1: Knowledge in doing simple computations using Excel sheet
CO 2: Understanding the basic of data entry and importing and exporting data
CO3: Comphrend the technique of data visualization and descriptive statistics
CO4: Acquire proficiency computing multivariate statistical techniques
CO5: Proficiency to apply analytical skills in research

PART–A **6 x 1 = 6**

Choose the correct answer

1. If both the variables vary in the same directions correlation is said to be **CO2K2**
   a.) Positive b.) Negative c.) Zero d.) Linear
2. _____ is a statistical procedure for determining the difference between observed and expected date **CO4K2**
   a.) ANOVA b.) Regression c.) Correlation d.) Chi-square test
3. _____analysis helps to find out the relationship between dependent and independent variable. **CO2K2**
   a.) Regression b.) Correlation c.) Factor d.) Discriminant
4. _____ analysis is one of the statistical analysis where two variables are observed **CO1K2**
   a.) Univariate b.) Bivariate c.) Regression d.) ANOVA
5. ANOVA was developed by _____ **CO2K2**
   a.) Galton b.) Karl Pearson c.) Spearman d.) R.A.Fisher
6. _____ analysis is statistical method correlated variables in terms of unobserved variables **CO4K2**
   a.) Factor b.) Bivariate c.) Regression d.) Discriminant

PART–B

Answer the Following Questions 3x6=18

(Answer should not exceed 400 words or two pages)

7a. Calculate spearman rank correlation for the following data **CO4K3**

Students	A	B	C	D	E	F	G
Rank in Maths	7	5	4	3	2	1	6
Rank in Science	5	7	6	2	3	1	4

or

7b. Write a short note on regression analysis? **CO1K3**

8a. Explain the difference between the bivariate and Univariate analysis. **CO2K3**

or

8b. The following table contains the score details of three students. Using the one way ANOVA in Excel technique, we can examine if the mean values of the three datasets i.e., the scores of Students 1, 2, and 3, are the same or significantly different. **CO1K3**

Subject	Student I	Student II	Student III
History	85	88	83
Geography	95	93	90
Economics	90	94	93
Maths	98	93	94
Physics	84	80	88
Chemistry	88	89	92
Biology	87	86	84

9a. Find the descriptive statistics for the scores of 10 students participants in test for following data? **CO3K3**

Students Score	82	93	91	55	48	78	63	46	40	51

or

9b. Explain the function of discriminant analysis?. **CO4K3**

Part-C

Answer the following questions **3x12=36**

(Answer should not exceed 800 words or four pages)

10a. Explain about the correlation and its types? **CO5K3**

or

10b. In an anti malaria campaign in India malaria was administrative to 500 out of a total population 2000. The number of fever and non-fever cases shown below the calculate chi-square for the following data? **CO4K3**

Treatment	Fever	No fever	Total
Malaria	20	480	500
Non malaria	100	1400	1500
Total	120	1880	2000

11a. Calculate the Karl Pearson coefficient for the following data. **CO2K3**

Marks in Accountancy	13	12	14	16	15	11
Marks in Statistics	26	24	24	27	25	23

or

11b. Explain the difference between regression and correlation analysis. **CO2K3**

12a. Calculate the Regression for the following data.

Students	A	B	C	D	E	F	G
Marks in Maths	65	37	74	40	50	75	85
Marks in Science	70	40	81	46	60	76	73

or

12b. Discuss about the factor analysis with example. **CO4K3**

Number of copies: 20

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