REVA UNIVERSITY
Bengaluru, India

SCHOOL OF COMPUTER SCIENCE AND APPLICATIONS
Odd Semester 2024-2025
Assignment II

Programme: PG – MCA
Semester: I
Section: A
Date of Announcement: 29-01-25
Date of Submission: 03-02-25

Course Code: M23DE0101
Course Title: Mathematics for Computer Applications
Name of the Faculty: Dr. M Vinayaka Murthy

Sl. No	Assignment Question	CO	PO	PSO
1.	From the following data of marks obtained by 10 students in Computer Science and Statistics, calculate the co-efficient of rank correlation x: 35, 56, 50, 65, 44, 38, 44, 50, 15, 26 y: 50, 35, 70, 25, 35, 58, 75, 60, 55, 35	**2**	**1,2**	**1,3**
2	Find the regression line of y on x - axis for the following data also estimate y corresponding to x = 6.2 x: 1, 2, 3, 4, 5, 6, 7, 8 y: 9, 8, 10, 12, 11, 13, 14, 16	**2**	**1,3**	**1,2**
3.	a) In a bivariate data, the regression lines are $2x - y + 4 = 0$ *and* $x - y + 1 = 0$, find r, $\bar{x}$, *and* $\bar{y}$ b) Given the line of regression as $8x - 10y + 66 = 0$ and $40x - 18y - 214 = 0$, determine the mean value of x *and* y c) In a bivariate data, the regression lines are $4x - 5y + 33 = 0$ *and* $20x - 9y = 107$, find $\bar{x}$, *and* $\bar{y}$	**2**	**1,2**	**1,3**
4	Fit a straight line equation i.e., y = a + bx to the following data x: 1911, 1921, 1931, 1941, 1951 y: 15, 23, 28, 32, 39	**2**	**1,2**	**1,3**
5	Fit a second-degree parabola to the following data. x: 0, 1, 2, 3, 4 y: 1, 1.8, 1.3, 2.5, 6.3	**2**	**1,2**	**1,3**

6	From the following data of marks obtained by 10 students in Mathematics and Statistics, calculate the co-efficient of rank correlation x: 43, 96, 74, 38, 35, 43, 22, 56, 35, 80 y: 30, 94, 84, 38, 30, 18, 30, 41, 48, 95	**2**	**1,3**	**1,2**
7	The height (x cms) and weight (y kgs) of 6 students are as follows. Obtain the two regression equations. Also find the expected height a person whose weight in 60 kgs x: 153, 157, 168, 160, 170, 163 y: 48, 50, 50, 49, 54, 53	**2**	**1,3**	**1,2**
8	Calculate the co-efficient of correlation and obtain the lines of regression for the following data x: 78, 89, 97, 69, 59, 79, 68, 57 y: 125, 137, 156, 112, 107, 138, 123, 108	**2**	**1,2**	**1,3**
9	Find the co-efficient of correlation for the following data x: 36, 43, 47, 28, 35, 50, 40 y: 73, 44, 35, 30, 20, 36, 40	**2**	**1,2**	**1,3**
10	From the following data of marks obtained by 10 students in Computer Science and Statistics, calculate the co-efficient of rank correlation x: 35, 56, 50, 65, 44, 38, 44, 50, 15, 26 y: 50, 35, 70, 25, 35, 58, 75, 60, 55, 35	**2**	**1,2**	**1,3**
11	Find the co-efficient of correlation for the following data x: 62, 64, 69, 70, 71, 72, 74 y: 126, 125, 139, 145, 152, 180, 208	**2**	**1,2**	**1,3**
12	Find the regression lines for the following data x: 1, 2, 3, 4, 5 y: 2, 5, 3, 8, 7	**2**	**1,2**	**1,3**

Subject Teacher **H O D** **Director**