C PROGRAMMING

PRACTICAL QUESTIONS

1. C. U. 2012:

(a) Write down a program in C to compute the Correlation Co-efficient of two variables 'X' and 'Y' and the Linear Regression Co-efficient of 'Y' on 'X' given 'n' pairs of values. Use this program to find the values of the Correlation Co-efficient and the Regression Co-efficient of 'Y' on 'X' for the following data representing the age of husband (X) and wife (Y) for twenty four couples. **5**

Srl.	X	Y
1	22	18
2	24	20
3	26	20
4	26	24
5	27	22
6	27	24
7	28	27
8	28	24
9	29	21
10	30	25
11	30	29
12	30	32
13	31	27
14	32	27
15	33	30
16	34	27
17	35	30
18	35	31
19	36	30
20	37	32
21	37	33
22	38	32
23	39	34
24	40	35

2. C. U. 2013:

(a) Nine students were interviewed by two judges and their scores are given below:

Judge 1:	6	11	10	15	8	7	9	14	12
Judge 2 :	8	10	13	9	12	15	7	6	18

Write a program in C to compute Pearson's product moment Correlation Coefficient with the data given above and comment. **5**

3. C. U. 2014:

(a) Write a program in C to calculate Mean, Standard Deviation, Skewness and Kurtosis of the following dataset on the weekly wages (in rupees) of 28 labourers working in a factory.

220, 268, 258, 242, 210, 268, 272, 242, 311, 290, 300, 320, 319, 304,
302, 318, 306, 292, 254, 278, 210, 240, 280, 316, 306, 215, 256, 236 **5**

4. C. U. 2015:

(a) Write a program in C to calculate Correlation Coefficient of the following data: **5**

X :	14	19	24	21	26	22	15	20	19
Y :	31	36	48	37	50	45	33	41	39

5. C. U. 2016:

(a) Write a program in C to calculate Product Moment Correlation Coefficient of the following data: **5**

X :	14	19	24	21	26	22	15	20	19
Y :	31	36	48	37	50	45	33	41	39

6. C. U. 2017:

(a) Write a program in C to determine the two Regression Equations of the following data: **5**

X :	14	19	24	21	26	22	15	20	19
Y :	31	36	48	37	50	45	33	41	39

7. C. U. 2018:

(a) Write a program in C to calculate Skewness and Kurtosis of the following data: **5**

Rain fall (in inches)	0	10	20	30	40	50	60	70
Number of days	150	140	100	80	80	70	30	14