

Paper/ Course Code: Computer Oriented Statistical Techniques / USIT403
(Duration - 40 min.)

Programme: S.Y.B.Sc. (I.T.)

Semester: IV

Max. Marks: 20

Date: 09/03/2023

Please check whether you have got the right question paper

N.B. - 1. Attempt any FOUR questions.

2. Answers to the same questions must be written together.

3. Numbers to the right indicate marks.

Attempt any FOUR of the following

(20)

Q. 1. Manish and Mandar are trying to make Software for company. Probability that Manish can be success is $1/5$ and Mandar can be success is $3/5$, both are doing independently. Find the probability that i) both are success. ii) Atleast one will get success. (5)

Q. 2. Calculate standard deviation for the following data. Also find its coefficient of variation. (5)

Marks	30-40	40-50	50-60	60-70	70-80	80-90
No. of students	3	15	27	15	8	2

Q. 3. Find first four raw moments for the following data: (5)

x	-1	0	1	2	3	4
f	2	4	3	7	3	1

Q. 4. For the following ungrouped data find the Karl Pearson's Coefficient of Skewness. (5)
12, 18, 25, 15, 16, 10, 8, 15, 27, 14

Q. 5. The average income of 100 men in a city is Rs. 15,000 with standard deviation Rs. 8,500 and the average income of 100 women is Rs. 12,000 and standard deviation Rs. 9,000. Can it be said at 5% level of confidence that there is a significant difference between the average income of men and women? (At 5% level of significance the value of 1.96) (5)

Q. 6. A manufacturer claims that 10% of his product is defective. A sample of 300 items selected at random had 32 defective items. Test his claim at 1% level of significance. (At 1% level of significance the value of 2.58) (5)
