

**SARSUNA COLLEGE (563)**

**BSc (Gen) Examination 2020-21, University of Calcutta**

**System: CBCS Semester: 3 Subject: Statistics Paper: CC/GE-3 (practical) Time: 2 Hrs 30 Minutes**

**Full Marks: 30**

*Send the scanned copy (pdf) of answer script (A4 page) to the following mail ids*

[gsanjib.stat@gmail.com](mailto:gsanjib.stat@gmail.com), [sarsunastatistics@gmail.com](mailto:sarsunastatistics@gmail.com)

Write the following information on the top of the first page

Name:		
College Name:		
Registration No:	Roll No: (Both college and University)	
Department:	Subject:	Paper:
Mobile No:	Mail id:	
* Give serial number of the additional pages with your registration number and roll number		

Answer all the questions.

1. Following are the yields in gm. per plot (plot size=1/2000 th of an acre). 6 plots being allotted to each variety:

Variety 1	Variety 2	Variety 3
77	105	46
70	108	70
63	127	87
84	75	77
95	130	49
81	72	73

Analyse the data to see if the varieties differ with respect to average yield?

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2. Three teaching methods are to be compared to see the difference, if any, in its effectiveness on students' learning. Fifteen students are selected randomly from five different schools of a city. Three students from each school so selected are subjected to a training given under three teaching methods under comparison. Teaching methods are applied to the selected students in a random order. At the end of a year the same test is given to all the students and their score are recorded.

Different Schools	Teaching Method		
	1	2	3
1	48	55	84
2	73	85	68
3	51	70	95

4	65	69	74
5	87	90	67

Carry out a two-way analysis of variance for the above data.

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3. A manager of a soft-drink company measured the contents of 11 randomly selected bottles to see if the median content of the bottles is 300 ml or less. The contents (ml) of the bottle were: 298.1, 300.2, 299.8, 296.8, 300.1, 300, 301.1, 297.2, 298.1, 301.2, 299.9.  
Perform a suitable test to examine if the median content of the bottles is less than 300ml.

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