PG (NEW) CBCS M.Sc. Semester-II Examination, 2020 GEOGRAPHY PAPER: GEO 295 PRACTICAL (STATISTICAL TECHNIQUES)

Full Marks: 30

Time: 2 Hours

Write the answer for each unit in separate sheet

GEO295.1 BASIC STATITICS IN GEOGRAPHY

Answer any <u>one</u> question of the following:

1. Differentiate between nominal and ordinal scale. what are the uses of ratio scale.

8+7

- In case of ordinal data which type of correlation method can be used? Explain with the help of an example.
 15
- Distinguish between null and alternative hypothesis. What are the characteristics of normal curve?
 7 + 8
- 4. Weight of 10 students is as follows:

S. No. 1 2 3 4 5 6 7 8 9 10

Weight (kg.) 38 40 45 53 47 43 55 48 52 49

Can we say that the variance of the distribution of weight of all students from which the above sample of 10 students was drawn is equal to 20 kgs? Test this at 5 per cent and 1 per cent level of significance. 15

5. Discuss any two probability sampling techniques.

GEO295.2 ADVANCED QUANTITATIVE METHODS

Answer any <u>one</u> question of the following:

1. Set up an analysis of variance table for the following per acre production data for three varieties of wheat, each grown on 4 plots and state if the variety differences are significant.

(P.T.O.)

15 x 1= 15

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15

Plot of land	Per acre production data Variety of wheat			
	1	6	5	5
2	7	5	4	
3	3	3	3	
4	8	7	4	

2. Set up an analysis of variance table for the following two-way design results: 15

		(in metric tonnes)
Å	B	с
6	5	5
7	5	4
3	3	3
8	7	4
	A 6 7 3 8	A B 6 5 7 5 3 3 8 7

Per Acre Production Data of Wheat

3. Discuss different model building techniques.

4. Elaborate with example how we can fit a second degree polynomial curve to bivariate geographical data.

5. Differentiate between multiple regression and simple linear regression. State the basic assumptions of the analysis of variance. 15

15