2018

CBCS

3rd Semester

GEOGRAPHY

(Honours)

PAPER—C6P

(Practical)

Full Marks : 20

Time : 2 Hour

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Statistical Methods in Geography

(Set–1)

Answer *all* questions

1. Consider the following dataset as wardwise distribution of female literacy (%) in an urban area and answer the following :

91.4	88.1	89.2	78.3	77.8
85.2	85.2	87.1	79.1	90.2
90.3	77.1	89.7	80.4	89.0
78.7	94.1	90.5	90.8	83.2
92.1	95.3	92.3	93.1	77.1
95.2	80.0	95.0	88.2	91.2
82.9	78.0	77.7	82.2	86.5
81.5	83.9	91.3	86.7	83.6

(a) Prepare a frequency distribution table consisting of at least five classes. 3

(b) Construct a histogram based on the tabulated data. 2

(c) Prepare a sample ($n = 10$) from the given dataset through applying systematic random sampling technique without replacement after arranging all the items in array and selecting every 4th item starting from the first one. $1\frac{1}{2}$

(d) Calculate the sample size of the derived sample in terms of percentage with respect to total observation. Derive sample arithmatic mean and sample standard deviation. $\frac{1}{2} + 1\frac{1}{2} + 1\frac{1}{2}$

2. Using the data provided in the table below :

(a) Draw a Scatter Diagram.

(b) Compute and draw the regression line using least square method.

(c) Interpret the nature of the relationship between the variables. 2+3

Relative Relief and Vegetation Cover

Relative Relief (m)	71	90	122	52	200	250	32	93	110	105
Vegetation Cover (%)	31	37	52	25	95	96	2	46	55	52

3. Practical Note Book and Viva-Voce. 2+3

―――――

2018

CBCS

3rd Semester

GEOGRAPHY

(Honours)

PAPER—C6P

(Practical)

Full Marks : 20

Time :

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Statistical Methods in Geography

(Set–2)

1. A temperature record (°C) of different sites in North Bengal on colder day of December, 2017 is given below :

   10.1, 11.3, 12.5, 13.2, 9.7, 7.6, 7.9, 8.9, 10.7, 11.8, 14.1, 13.3, 12.6, 12.1, 11.5, −0.9, 1.5, 1.5, 3.4, −2.7, −4.5, 4.2, 5.9, 6.7, 7.7, 8.8, 9.9, 5.5, 10.1, 7.4, 8.3, 1.2, 3.9, 8.6, 5.8, 8.1, 13.1, 11.9, 10.5, 9.3, −4.1, 0.5, 7.9, 8.3, 8.0, 2.4, 5.7, 9.2.

   (a) Prepare a proper frequency distribution table.

   (b) Draw the proper frequency diagram based on relative frequency.

(c) Graphically represent median, lower quartile and upper decile.

(d) Calculate the standard deviation of the temperature distribution at different sites. $3+2+2\frac{1}{2}+2\frac{1}{2}$

2. The following data shows the clay contents (%) and porosity (%) of some collected soil sample in a study area :

Sl. No. of Soil Sample	Clay Content (%)	Porosity (%)
1.	19.9	32.4
2.	29.3	40.5
3.	39.2	47.8
4.	54.7	57.8
5.	35.9	46.5
6.	44.3	49.3
7.	24.4	36.5
8.	38.1	44.0
9.	52.5	54.5
10.	43.1	45.6
11.	61.5	59.9
12.	52.2	57.1

(a) Draw the scatter diagram with regression line.

(b) What will be the expected porosity when clay conents are 30%, 40% and 50% in the soil samples?

3+2

3. Laboratory Note Book and Viva-Voce.   2+3