NEW

Part–III   3-Tier

2018

GEOGRAPHY

(Honours)

PAPER—VIII   (Set–1)

(PRACTICAL)

Full Marks : 100

Time : 6 Hours

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.

Answer *all* questions

Unit—I

1. Consider the following dataset on the magnitude of built-up areas (hectares) observed in 30 municipal wards.

228.86	197.90	270.61	93.11	69.79
62.23	133.99	184.22	95.26	115.69
109.86	154.70	297.83	108.36	103.68
221.27	160.84	247.17	100.85	139.33
104.59	110.93	140.74	108.65	184.77
162.65	131.16	138.25	154.40	67.23

(Turn Over)

(a) Prepare a frequency distribution table on the given dataset with suitable number of classess.   5

(b) Compute sample standard deviation and estimate its corresponding population standard deviation.

$3+1$

(c) How is histogram different from bardiagram ?   1

2. The following table presents a cumulative frequency distribution on percentage of marks obtained by 100 Geography students.

Marks obtained (%)	Candidates
Less than 10	10
Less than 20	15
Less than 30	25
Less than 40	40
Less than 50	80
Less than 60	90
Less than 70	95
Less than 80	100

(a) Find out Q_2 and D_2 % of marks obtained by the candidates. $2+2$

(b) Find out the number of candidates who secured marks between 55% and 75%. 2

(c) Distinguish between stratified random and cluster sampling. 2

(d) State the characteristics of normal distribution. 2

Unit—2

3. Basin areas and corresponding total stream length are given in the following dataset.

Basin Area (Sq.km) : 6.3 7.3 9.5 10.5 11.5 11.7

12.5 13.6 14.5 16.3

Stream Length (km) : 12.0 16.4 15.8 21.0 17.5 26.3

23.0 25.4 28.6 30.2

(a) Construct a scatter diagram to show the trend of relationship between basin area and stream length. 4

(b) Draw a scatter diagram to plot the data and also draw the line that fits the data best using least square method. 1+4

(c) Compute percentage of variance in stream length explained by basin area.   3

(d) Find out standard error of estimate for the model.   3

4. In a square area mesuring 60 sq. km there are 16 sattlements. The observed mean intersettlement distance is found to be 1.45 km.

(a) Find out the expected mean intersettlement distance and comment on the distribution pattern of settlement through nearest neighbour analysis.   3

(b) Compute standard error of the expected mean distance and test the significance of the derived pattern after formulating suitable hypothesis. $(z = \pm 1.96, \alpha = 0.05)$.   2+2

(c) Highlight major applications of time series analysis in geography.   2

(d) How are Lorenz curve and Gini's coefficient related ?   1

Unit—3

5. (a) Prepare a land use / land cover map extracting physical and socio-cultural features from the given satellite image and interprete the map. 6+2

(b) How do 'tone' and 'association' help in visual interpretation of satellite image? 2

6. (a) MNOP are the points marked on the field. Conduct a field survey using GPS receiver (to be provided) to take readings of the points and plot them graphically with suitable scale. 3+4

(b) Briefly state the objectives of Indian Regional Navigation Satellite System (IRNSS). 3

Unit—4

7. (a) Field report. 15

(b) Viva-Voce on field report. 10

Unit—5

8. (a) Laboratory Note Book.   5

     (b) Viva-Voce on Laboratory Note Book.   5

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