NEW

Part–III 3-Tier

2019

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. The following table shows number of rainy days during June to October for 60 weather stations of a region. On

the basis of this dataset attempt the following questions.

6	9	58	56	0	25	32	34	38	9
67	17	61	51	35	38	37	13	44	5
68	48	35	31	32	21	23	23	49	66
19	25	34	42	46	42	45	25	63	41
35	36	37	35	33	46	28	31	34	42
46	38	36	45	48	53	27	29	31	55

(a) Prepare a frequency distribution table with seven equal classes. 4

(b) Calculate less than and more than cumulative frequencies and draw ogives, and graphically find out median with the help of ogives. 1+1+1+1+1

(c) Calculate mean, mode and standard deviation. 3+3+3

(d) Calculate skewness with the help of mean, mode and standard deviation. 2

Unit—2

2. The table below presents amplitude of relief (in m) and settlement frequency (per 10 km^2).

Amplitude of relief (m) :	30	60	70	80	90	100	130
	140	150	170	190	200		
Settlement frequency :	16	10	20	17	14	11	17
(per 10 km^2)	12	7	6	9	8		

(a) Compute the degree of association between the two given variable employing Pearson's product moment correlation coefficient. 6

(b) Test the Statistical significance of the derived correlation after formulating suitable hypothesis (t = 2.23, α = .05, df = 10). 3

(c) Derive co-efficient of determination and comment on it. 2

(d) How is bivariate regression different from multivariate regression ? 1

3. Distribution of landholdings in one administrative region as given by size of holdings, the number of holdings and area of holdings bellow :

Size of land holding (hec.)	*No. of land holdings (in hundred)*	*Area of land holding (in hundred hec.)*
< 2	14.1	8.8
2-4	16.5	23.5
4-6	18.3	33.9
6-8	4.2	21.1
8-10	3.1	18.2
10-12	1.8	15.0
12-14	1.5	12.6
≥ 14	0.8	9.5

(a) Show the inequality in size distribution of land holdings in the administrative region with proper diagram.

(Continued)

(b) Interpret the inequality of the distribution. 5+3

4. (a) If the existed cropped area in a CD Block are 48.5%, 23.1%, 2,3% and 15.3% for rice, potato, oilseed, maize and pulses respectively, find out the proper crop combination for that CD Block.

(b) Highlight the major applications of Nearest Neighbourhood Analysis in Geographical Study and Research. 3+2

Unit—3

5. (a) Prepare a land use and land cover map through extracting at least three physical and three socio-economic features from the given SFCC satellite image (to be selected by the examiners) and interpret the map. 6+2

(b) Mention spatial and spectral resolutions of LISS-IV sensor. 2

6. (a) Conduct a field survey using a GPS receiver (to be provided) at points A, B, C, D and E marked on the ground (to be marked by the examiners). Prepare a field book after taking necessary readings and plots the survey points graphically on a suitable scale. 3

(b) What are 'ephemeris' and 'almanac' associated with GPS signals ? 2

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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