

OLD
Part-III 3-Tier
2017

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

Group—A

1. From a topographical map of survey of India following spot height data are taken.

Spot height in metres

| | | | | | |
|-----|-----|-----|-----|-----|-----|
| 948 | 849 | 838 | 911 | 997 | 868 |
| 904 | 881 | 999 | 904 | 831 | 908 |
| 834 | 900 | 861 | 752 | 875 | 867 |
| 768 | 785 | 888 | 820 | 793 | 760 |
| 857 | 914 | 883 | 734 | 886 | 797 |

(Turn Over)

- (a) Prepare a frequency distribution table.
- (b) Draw histogram and find the modal value from the histogram.
- (c) Calculate the mean and median.
- (d) graphically represent Q_3 , D_7 and P_{88} .
- (e) Clasify the term "Central tendency". $5+4+5+4+2$
2. Annual precipitation in c.m. of a place over 20 years is given in the following table.

| | | | | | | | | | |
|-----|-----|----|-----|-----|-----|-----|-----|----|-----|
| 93 | 81 | 81 | 130 | 78 | 94 | 100 | 96 | 86 | 100 |
| 109 | 107 | 89 | 98 | 105 | 111 | 110 | 105 | 89 | 104 |

- (a) Calculate the standard deviation.
- (b) Estimate the standard error of the mean.
- (c) Draw a suitable diagram to show the variation of precipitation. $4+3+3$

Group—B

3. Using the data given in the table.

| Area under Wheat in million Hq. | Production of wheat (in million tonnes) |
|------------------------------------|--|
| 22.28 | 36.31 |
| 23.00 | 47.05 |
| 24.09 | 58.99 |

| | |
|-------|-------|
| 23.50 | 47.70 |
| 24.16 | 56.60 |
| 23.26 | 55.87 |
| 24.43 | 56.80 |
| 24.50 | 58.50 |
| 25.01 | 62.01 |
| 25.93 | 69.28 |

- (a) Draw a scatter diagram and the line of best fit.
- (b) What will be the production of wheat when the land under it is 26 million hectares.
- (c) Interpret the relationship with reasons to support your answer. 4+4+2+2
4. Find out the pattern of settlement distribution with the help of nearest neighbour technique. Analyze the distribution of settlement within the help of Nearest Neighbour Index (NNI) from the given topographical map and interpret the result. 4+5+3
5. Answer the following questions :
- (a) What are the principles of crop combination analysis as suggested by weaver.
- (b) Differentiate between birth rate & fertility rate.
- (c) Differentiate between equal distribution line and Lorenz Curve. 3×2

6. Answer the following questions: 10×2
- (a) Define temporal resolution.
 - (b) Define sun-synchronous & geo-stationary satellite.
 - (c) What is atmospheric window ?
 - (d) Mention the basic characteristics of IRS-IC & ID.
 - (e) What do you mean by IFOV ?
 - (f) What are the characteristics of digital image ?
 - (g) What is the difference between FCC & True Colour image ?
 - (h) What are the basic structure of GIS.
 - (i) What is topology ?
 - (j) Mention the major application of GIS in geographical study.
7. Prepare a land use / Land cover map from the given standard FCC and interpret it. 8+2
8. Laboratory Note Book and Viva-voce. 5+5
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