

**New**  
**Part-III 3-Tier**  
**2015**  
**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. The IQ scores of 40 students of a elementary school are :

118,	123	120,	129,	138
135,	132,	119,	125,	137
117,	122,	124,	137,	132
141,	140,	139,	142,	140
135,	127,	132,	141,	129
142,	148,	145,	147,	144
115,	132,	119,	139,	123
133,	142,	124,	117,	149

*(Turn Over)*

- (a) Prepare a frequency distribution table.
- (b) Calculate absolute and relative frequency.
- (c) Draw an ogive and calculate the seventh decile of the score from the ogive.
- (d) Calculate the mean and standard deviation of the scores. 5+3+7+5

2. Find out the co-efficient of quartile deviation (on ungrouped data) from the following information on female literacy rate.

Village No	Female literacy rate
1	58.9
2	74.7
3	53.1
4	80.7
5	99.9
6	88.8
7	90.2
8	68.2
9	71.5
10	60.3
11	95.4
12	93.4

Distinguish between discrete and continuous data.

8+2

**Group—B**

3. From the given data answer the following :

<i>Region</i>	<i>% of Population</i>	<i>% of Income</i>
A	10	18
B	15	12
C	5	17
D	20	13
E	7	15
F	13	7
G	22	13
H	8	5

- (a) Draw Lorenz curve.
- (b) Calculate the Gini's co-efficient.
- (c) Comment on the variation of population and income of the given regions.

5+3+2

4. From a given area (10 cm × 10 cm) of a toposheet (selected by the examiner) using nearest neighbour technique answer the following questions :
- (a) Calculate the mean distance between the settlement.
  - (b) Find out the settlement distribution pattern using Clark & Even's method.
  - (c) Analyse the causes of such distribution.
  - (d) What are the problems associated with nearest neighbour technique ? 4+2+2+2

**Group—C**

5. Prepare a land use/land cover map from the given standard FCC and interpret it. 10
6. Answer the following questions: 10×2
- (a) Mention different energy sources of remote sensing operations.
  - (b) Write down the advantages and disadvantages of longwave remote sensing.
  - (c) Distinguish between dry soil and wet soil spectral signatures that will lead you to identify both the features.
  - (d) What type of information will you gather from the Geo-synchronous satellite system?
  - (e) Differentiate between the visual image processing and digital image processing.
  - (f) Write a short note on the basic elements of GIS.
  - (g) Why ideal remote sensing is different from real remote sensing?
  - (h) What do you mean by vertical and horizontal datum?
  - (i) What is database management system?
  - (j) Define satellite image.

7. Using the following data —

- (a) Draw a scatter diagram and line of best fit.
- (b) Interpret the nature of relationship between the variables.
- (c) Calculate the expected total fertility rate for India at the given female literacy rate.

<i>Country</i>	<i>Female adult literacy rate (%)</i>	<i>Total Fertility Rate (Birth per women)</i>
India .	47.8	3.1
Pakistan	35.4	4.0
Bangladesh	40.8	3.2
Nepal	34.9	3.7
Indonesia	86.8	2.4
Srilanka	89.1	2.0
Malayasia	85.4	2.9
Japan	100.0	1.2
China	87.5	1.7
Thailand	90.5	1.8
		3+3+2+2

8. Laboratory Note Book and Viva-Voce.

5+5