Total Pages-4 + 2(Map)

NEW

Part-III 3-Tier

2017

GEOGRAPHY

(Honours)

PAPER—VII (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 the questions.

- (a) Draw a representative profile on the given topographical map and identify the Brake of Slope. Identify the map number of S₀₁ Topographical map lying to the east of 73 ^J/₆.
 - (b) Prepare a map to show the broad Physiographic divisions of the region shown in supplied topographical map based on the identified break-of-slope. 10

2. (a) Classify the streams into different orders proposed by Strahler under a selected drainage basin [Not more than 6 km (12 cm) × 6 km (12 cm) size]. Calculate Bifurcation ratio between the drainage orders and interpret the result (Tracing paper to be supplied)

8+4

- (b) Establish the relationship between relief and transport frrom selected grid of supplied topographical map.
 (grid to be selected by the examiners)
- 3. (a) Construct suitable Castogram (graphically) to represent the following data.
 - (b) Prepare a spread sheet in MS Excel to enter the following data and draw suitable castogram with proper annotation. (Print out of the work to be attched with answer script).

| Year | No. of Birth | No. of Death |
|------|--------------|--------------|
| 1961 | 3500 | 1615 |
| 1971 | 2700 | 1830 |
| 1981 | 3200 | 1100 |
| 1991 | 1750 | 1200 |
| 2001 | 2200 | 1422 |

- 4. (a) Interpret the weather map under following heads:
 - (i) Distribution of Pressure;
 - (ii) wind direction;
 - (iii) Interpretation of wind direction in relation to pressure distribution. 5+5+5
 - (b) Attempt any one of the following (sellected by lottery):
 - (i) Take the readings from dry bulb and wet bulb tharmometer and record it in proper tabular form.

 Calculate relative humidity of air with the help of humidity chart.

Or

- (ii) Pecord readings from tharmometer in proper table and calculate the atmospheric pressure in mb. with necessary temperature correction.
- 5. (a) Prepare a survey schedule for collecting data on any of the environmental problems of your locality mentioning two objectives of your enquiry [At least ten questions addressing the problem and objectives]
 - (b) Attempt any one of the following (To be selected by lottery):
 - (i) Estimate pH of the given soil sample with the help of soil kit. Define pH.

Or

- (ii) Classify texture of the given soil sample under four classes (three sieves). Prepare a table to show distribution of texture.
- 6. Practical Note Book and Viva-voce.

5+5

[Please follow the instructions on the practical note book mentioned in syllabus]

NEW

Part-III 3-Tier

2017

GEOGRAPHY

(Honours)

PAPER-VII (Set-2)

(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 the questions.

- 1. The latitude and longitude of a point at Digha is 21°30'N and 87°30'E. It lies in the sheet no 73 (20°N to 24°N and 84°E to 88°E):
 - (a) Find out the topographical sheet number showing this very point on:
 - (i) 1°×1° sheet;
 - (ii) 15'x15' sheet;

- (b) Find out the R. F. of the following topographical sheets:
 - (i) 54;
 - (ii) 54D;
 - (iii) $54\frac{D}{sw}$;
 - (iv) $54\frac{D}{16}$.

1×4

- (c) Draw superimposed, projected and composite profiles (3 serial sections) on 5'x5' grid (selected by examiners) from the given Indian topographical map of plateau region and identify the different topographic characteristics of the given region. 9+3
- 2. (a) Identify the different orders of stream after Strahler) from the drainage basin (To be identified by the examiners) from the given topographical map. (Area of the basin will not be more than 6 km × 6km). Calculate the bifurcation ratio between the stream orders.
 - (b) Prepare Shortest Path matrix for different nodes in the given map and find out the most accessible node with the help of Shimble Index and interperet.

5+3+2

3. Draw suitable diagram graphically as well as in MS-Excell Spread Sheet. (Print out of computer work is to be attached with answer script)

| Average Age (Yr) | 3 | 15 | 27 | 39 | 51 |
|------------------|------|------|------|------|------|
| Male | 1386 | 1727 | 1681 | 1397 | 1130 |
| Female | 1403 | 1682 | 1728 | 1347 | 191 |

5+10

4. (a) Draw a climograph on the basis of the given data. Also interpret and identify the climatic type. 7+2+1

| Months | J | F | M | A | M | J | J | Α | S | 0 | _I N | D |
|------------------------------|------|------|------|------|------|------|------|------|------|------|----------------|------|
| Wet Bulb Temp(°F) | 32.4 | 36.8 | 42.5 | 30.1 | 62.2 | 68.6 | 72.1 | 68.7 | 67.0 | 64.9 | 52.4 | 38.1 |
| Re lative Humidity (%) | 79 | 69 | 65 | 57 | 45 | 55 | 55 | 42 | 55 | 45 | 45 | 52 |

- (b) Selection by lottery (any one):
 - (i) Take the readings from dry bulb and wet bulb thermometer and record it in proper tabular form.

 Calculate Relative Humidity with the help of R-H chart. What do you mean by Relative Humidity?

8+2

Or

(ii) Record readings from barometer and determine atmospheric pressure in mb at that time after necessary temperature correction. Why is mercury used in barometer?

(Turn Over)

- 5. (a) Selection by lottery:
 - (i) Estimate pH of given soil sample with the help of soil kit. State the necessity of estimating pH.

7+3

Or

- (ii) Classify texture of the given soil sample under four classes (using three sieves). Prepare a table to show the distribution of texture.
- (b) Construct a survey schedule for collecting data on a selective environmental problem of your locality. Name the problem and mention atleast two objectives. At least ten questions are to be set addressing the problem and objectives.
- 6. Practical Note Book and Viva-Voce 5+5
 [Please follow the instruction on the practical note book mentioned in the syllabus]

NEW

Part-III 3-Tier

2017

GEOGRAPHY

(Honours)

PAPER-VII (Set-3)

(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 the questions.

- Write the topographical sheet no. and scale of the following:
 - (i) toposheet falls to the cast of 63k
 - (ii) toposheet falls to the north of 72 k/NE

- (iii) toposheet falls to the west of 73 1/7
- (iv) toposheet falls to the south of $78 \frac{M}{12/3}$
- (b) Identify a basin not more than 6 km (12 cm) × 6 km (12 cm) (to be identified by the examiners) and divide the basin into broad physigraphic zones.
- (a) Divide drainage basin in different slope zone using Wentworth's method and interpret the diagram.
 8+2
 - (b) Calculate Shimbel index through shortest path analysis of the given transport network. Also identify the central location.
- 3. Draw suitable diagram both graphically by hands and by the use of computer to show the status of workers. Attach the printout sheet with your answerscript and interprete the diagram.
 5+10

| District | Categories of workers | | | | | |
|------------------|-----------------------|------------------|--|--|--|--|
| | Main Workers | Marginal Workers | | | | |
| Almora | 205951 | 87321 | | | | |
| Bageswar | 85922 | 32993 | | | | |
| Champawat | 56199 | 33981 | | | | |
| Nainital | 222669 | 57203 | | | | |
| Pithoragarh | 123987 | 74680 | | | | |
| Udamsingth Nagar | 298576 | 94772 | | | | |

| 4. | (a) | Interprete | the | weathermap | on | the | following | heads | : |
|----|-----|------------|-----|------------|----|-----|-----------|-------|---|
|----|-----|------------|-----|------------|----|-----|-----------|-------|---|

| (i) Nature and type of cloud cover. | | | | |
|--|---|--|--|--|
| (ii) Wind direction. | 3 | | | |
| (iii) Identify the season stating the reasons. | 2 | | | |

(b) Selection by lottery (any one):

(i) Read the dry bulb and wet bulb temperature and record them in proper table. Calculate the relative humidity of air with the help of humidity chart. Why is the wet bulb temperatur usually lower than dry bulb temperature?

- (ii) Record the reading from Barometer in an appropriate table and calculate the atmospheric pressure in mb. at the time with necessary height currection. What do you mean by temperature correction of barometer reading? 8+2
- 5. (a) Selection by lottery (any one):
 - (i) Measure the pH value of the soil from the supplied sample with the help of the soil kit. 8
 - (ii) Identify the soil texture from the supplied sample with the help of soil sieve set. Atleast four textural classes (3 sieves) are to be used. Show the result with proper table.
 - (b) Prepare a questionnaire with 10 questions on any of the problem, you ideatified in your locality. Mention the problems and state atleast two major objectives. All the questions are to be strictly linked with the stated objectives.
- 6. Laboratory Note Book and Viva-voce. 5+5

[Please follow the instructions on the practical note book mentioned in syllabus]