

Total No. of Pages : 4 BA/BSC/Part-II/Geog(H)-V(Set-I)(Prac)

2019

Part – II

GEOGRAPHY

(Honours)

Paper – V

(Set – I)

(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 :**

- (a) Draw a Vernier Scale to read  $10^{\circ} 59' 36''$  when Vernier Constant and Main Scale divisions are  $12''$  and  $24''$  respectively. 10
- (b) The area of large waterbody on the original map and that of the reproduced map with

P.T.O.

R.F-1:64,000 is measured as 2.56 sq.cm and 400 sq.cm, respectively. What is the scale of the original map and the magnitude of reduction or enlargement of reproduced map. 5

2. Draw a geological section along the line AB on the given geological map and interpret the same under the following heads.
  - (a) Geological Succession.
  - (b) Topography and drainage in relation to underlying structure.
  - (c) Geological history 12+3+2+3
3. (a) Draw the graticules of Simple Conical Projection with one standard parallel for the area extending 35°N to 75°N and 20°W to 60°E at an interval of 10° and 20°W to 60°E at an interval of 10° on a scale 1:60×10<sup>6</sup>.
  - (b) State the important properties of this projection.
  - (c) Distinguish between perspective and non-perspective projection. 16+2+2
4. Conduct any one of the following surveys to be done allotted by the lottery.

(a) Make a closed traverse survey by Prismatic Compass survey around the four stations PQRS given in the field.

(i) Prepare the field book and enter the reading neatly.

(ii) Make necessary corrections.

(iii) Draw the traverse with necessary adjustment by parallel-meridian method.

(iv) Calculate the included angles at each of the station.

(v) Calculate the area of the traverse.

$$8+5+6+2+4$$

(b) Run a dumpy level survey along a line AB (Given in the field) of 25m long at 2.5m interval taking at least one change point when B.M at 4th station is 15.25m.

(i) Prepare the field book and enter the readings neatly.

(ii) Calculate the reduced levels.

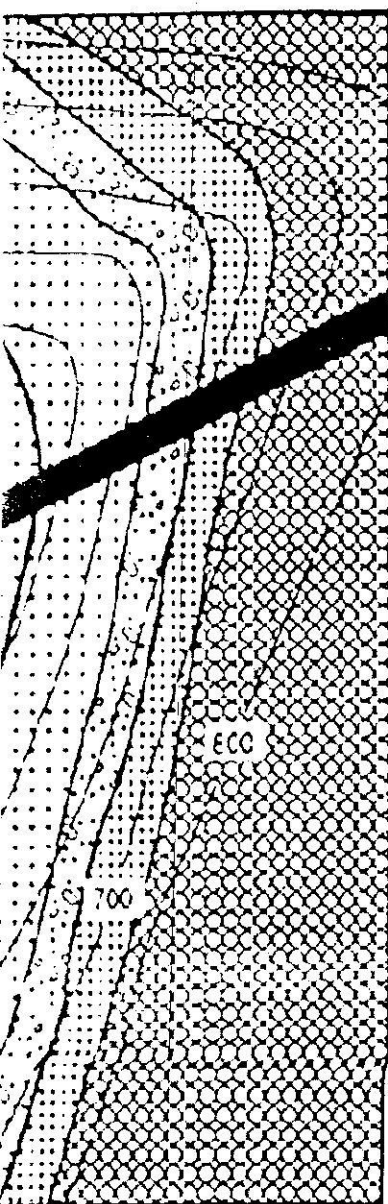
(iii) Show the arithmetic check.

(iv) Draw a profile on a suitable scale.

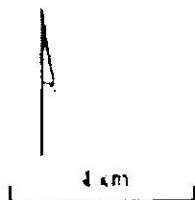
- (v) Calculate the gradient between highest and lowest points.
- (vi) Briefly discuss the types of Bench Marks. 10+3+3+4+3+2

*Or*

- (c) Determine the height and distance of the given object with transit theodolite (base inaccessible).
    - (i) Prepare a field book and enter the readings.
    - (ii) Calculate the height and actual distance of the object from the given ground station.
    - (iii) Plot the data with suitable scale.
    - (iv) Mention the different sources of error in the theodolite survey. 8+8+5+4
  - 5. Identify given (5) five specimen of Rocks and minerals mentioning at least two characteristics of each specimen. 5×2=10
  - 6. Laboratory Note Book and Viva-voce. 5+5=10
-



N



Heights in meters



GRANITE



PEGMATITE



DOLERITE



METAMORPHIC ALREOLE



CONGLOMERATE



OOOLITIC LIMESTONE



REEF



SANDSTONE



CALCAREOUS REEF



CALCAREOUS SILTSTONE

