

2019

B.Sc.

1st Semester Examination  
**GEOGRAPHY (Honours)**  
Paper - C 2-T  
(Cartographic Techniques)

Full Marks : 40

Time : 2 Hours

*The figures in the margin indicate full marks.  
Candidates are required to give their answers  
in their own words as far as practicable.*

**Group - A**

1. Answer any *one* question of the following :

1×10=20

(a) Define map projection. Classify map projection on the basis of the properties. Give examples. What map projection would you choose for trans-polar flight and why ? 2+5+3

(b) What is meant by Transit Theodolite ? How do *you conduct* theodolite survey to determine the

[ Turn Over ]

height of an object when the base is inaccessible.  
State the sources of error in theodolite survey.

2+5+3

### Group - B

2. Answer any *four* questions from the following within  
400 words : 4×5

(a) Distinguish between positive and negative vernier.  
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(b) Mention the characteristics of Generating Globe.  
Differentiate Generating Globe from Developable  
surface. What is constant of Cone ? 2+2+1

(c) Make a comparison between perspective and  
non-perspective projection. State the merits and  
demerits UTM projection. 2+3

(d) Why do military personals prefer Prismatic  
compas survey in strategic areas ? Mention the  
sources of error in Prismatic compas survey.  
2+3

(e) Mention the differences between Triangulation  
Survey and Traverse Survey. 5

(f) What are the sources of error in surveying ?

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Group - C

3. Answer any *five* questions from the following within 400 words : 5×2

- (a) State the advantages of Diagonal Scale in terms of its applicability over the plane scale.
  - (b) What do you mean by included angle.
  - (c) Define parallax.
  - (d) Differentiate between magnetic bearing and true bearing.
  - (e) What do you mean by Vernier constant ?
  - (f) Distinguish between Geoid and Spheroid.
  - (g) What is 'Reduced Level' ? How it is calculated in Rise-Fall method ?
  - (h) What do you mean by Bowditch correction ?
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