

UG/1st Sem (H)/Pr/22/(CBCS)

2022

GEOGRAPHY (Honours)

Paper Code : GEOH DC - 2B

(Practical)

Set - II

This alternative question set to be used in case of inclement weather condition only

2. The following bearings were observed in case of a close traverse survey by prismatic compass taken in anticlockwise direction. Correct for local attraction.

Line	Forward Bearing	Backward Bearing
AB	S 40°30' W	N 41°00' E
BC	S 81°00' W	N 80°30' E
CD	N 20°00' E	S 20°30' W
DA	S 80°00' E	N 80°00' W

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Set - III

This alternative question set to be used in case of inclement weather condition only

2. (A) The following is a page of a level field book. Fill in the missing readings and calculate the reduced levels of all the points and also carry out the necessary check. 5

Sl no	BS	IS	FS	Rise	Fall	RL
1	3.250					
2	1.880				0.600	
3		2.250				
4			1.920			
5		2.540			0.015	
6				1.000		
7	1.175		2.115			
8		1.625				225.305
9			1.895			
10			1.255		0.270	
sum	11.450				0.750	

( 2 )

(B) Find the included angle between lines AB and AC,  
if their reduced bearings are : 1+1=2

(i) AB N  $10^{\circ}30'$  E      AC S  $50^{\circ}30'$  E

(ii) AB S  $75^{\circ}45'$  W      AC N  $75^{\circ}30'$  E

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**Paper Code : GEOH DC - 2B**

**(Practical)**

**Set - III**

Full Marks : 15

Time : One Hour Thirty Minutes

*The figures in the margin indicate full marks.*

Attempt all the questions.

1. Draw a Vernier scale to show 1.97 inch. The given 9 small main scale divisions are equal to 10 vernier scale division and vernier constant is 0.01 inch. 5
2. For a given area, perform a closed traverse survey using a prismatic compass at three stations A, B and C in a clockwise direction assuming that all stations are free from any kind of local attraction.
  - (a) Prepare a field book and enter the reading taken in the field [Forward bearing only]
  - (b) Complete the table with the necessary calculations. 1+3+3=7

Or

( 2 )

Make a dumpy level survey along a line (8 m long). Take staff readings at 2m interval. The Bench Mark of last point is 32m. Calculate reduce level for all stations and plot it in a suitable scale.  $5+2=7$

3. Laboratory note book and viva-voce.  $1.5+1.5=3$
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2022

GEOGRAPHY (Honours)

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(Practical)

Set - I

Full Marks : 15

Time : One Hour Thirty Minutes

*The figures in the margin indicate full marks.*

Attempt all the questions.

1. Draw the graticules of Polar Zenithal Stereographic Projection at an interval of  $10^\circ$  extending from  $50^\circ\text{S}$  to  $80^\circ\text{S}$  and  $140^\circ\text{W}$  to  $140^\circ\text{E}$ . Consider the radius of the reduced earth as 10 cm. Determine the scale of the projection. 6+1=7
2. Make a dumpy level survey along a line (8m long). Take staff readings at 2m interval. The Bench Mark for the last station is 44m. Calculate reduce level for all stations.

5

Or

Measure the distance between the instrument (A) and the given object (B) using the levelling staff and transit theodolite, applying stadia method.

5

3. Laboratory note book and viva-voce. 1.5+1.5=3