



বিদ্যাসাগর বিশ্ববিদ্যালয়
VIDYASAGAR UNIVERSITY
Question Paper

B.Sc. Honours Examinations 2021

(Under CBCS Pattern)

Semester - II

Subject : GEOGRAPHY

Paper : C 4-T & P

Cartograms and Thematic Mapping

Full Marks : 60 (Theory : 40 + Practical : 20)

Time : 3 Hours

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Theory

Groups-A

Answer any *two* of the following questions :

15×2=30

1. Write a short note on the types and uses of bar graph.
2. Explain the rules of rounding with suitable example. Identify the procedure to find antilog from a number.
3. Define thematic map. What are the steps to be followed for the preparation of geomorphological map?
4. Elucidate the techniques and steps is used for the interpretation of land use map.

Groups-B

Answer any **one** of the following questions :

10×1=10

5. Distinguish between Isopleth and Choropleth.
6. Mention the methods for preparation of socio-economic maps as thematic map.

Paper - C 4-P

Cartography Lab (Practical)

Answer any **one** question form the following :

20×1=20

1. The table below is a field book obtained from a Dumpy Level survey showing some readings, rise and fall, and reduced levels in meter. The field survey was conducted based on the Rise and Fall method for the nine stations distanced apart at 5 meters to each other. The question marks (?) in the table indicate missing readings.

Stations	Staff readings (m)			Rise (m)	Fall (m)	Reduced levels (m)
	BS	IS	FS			
A	3.185					
B	2.164		?		0.661	
C	2.782		2.644			
D	?	0.985				
E		0.430		2.214		591.175
F	1.569		?		1.034	
G	1.945		0.792			
H	1.342		0.652			
I			?	0.814		

- (a) Fill the missing readings, find the rise and fall of the points, calculate the reduced levels of the stations, and apply the arithmetical check. Prepare a complete field book.
- (b) Plot a surface profile between A and I based on the reduced levels on a suitable scale.
- (c) Calculate slope and gradient between stations A and I.

9+9+2

2. The following are the bearings and length of the sides observed in running a closed traverse survey by Prismatic Compass. The question marks (?) in the table indicate missing readings.

Line	Length (m)	Observed Bearing		Error
		FB	BB	
AB	30	40°15'	?	-1°15'
BC	35	?	276°30'	+1°
CD	40	?	25°15'	+2°30'
DA	45	282°30'	?	-1°30'

- (a) Prepare a complete field book based on the table above.
- (b) Plot the traverse based on the prepared filed book on a suitable scale.
- (c) Calculate the included angles of the traverse. 9+9+2