

UG/5th Sem (H)/Pr/23/(CBCS)

2023

**GEOGRAPHY (Honours)**

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

**(Practical)**

**Set - I**

Full Marks : 15

Time : One Hour Thirty Minutes

*The figures in the margin indicate full marks.*

Answer *all* the questions.

**DSE-2A : Fluvial Geomorphology**

1. (a) The total number of streams in each stream order for the Dev Gad and Gagas river basins is given in the following table. Calculate the bifurcation ratio based on that. 2

Name of the River Basin	Stream Order				
	I	II	III	IV	V
Dev Gad	307	74	11	3	1
Gagas	648	155	31	9	1

- (b) Using the given map no. 1, calculate the sinuosity of the Damodar River using Schumm's (1963)/ Leopold, Wolman and Miller's (1964) formula. 3

P.T.O.

( 2 )

2. From the given map (map no. 2) divide the marked area into 25 equal-sized grids, then calculate stream frequency and prepare a stream frequency map.  $2+5=7$

Grid Direction

Grid No.	A	B	C	D	E
1					
2					
3					
4					
5					

3. Laboratory notebook and Viva-voce.  $1\frac{1}{2}+1\frac{1}{2}=3$
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**(Social & Cultural geography)**

1. Calculate Decadal Growth rate of the data given in the following and represent it with a suitable cartographic technique on the map provided of Malda district and interpret the same. 6+1=7

**Table-1** : Block-wise population of Malda District of 1991 and 2001.

Sl. No.	Name of the Blocks	Population, 1991	Population, 2001
1	Harischandrapur-1	129829	162406
2	Harischandrapur-2	157077	198039
3	Chanchal-1	143288	172404
4	Chanchal-2	132697	165192
5	Ratua-1	173655	217356
6	Ratua-2	125762	160904
7	Gazole	233139	294715
8	Bamongola	107579	127252
9	Habibpur	168397	187650
10	OldMalda	132999	131255
11	Englishbazar	180434	226236
12	Manikchak	177572	214127
13	Kaliachalk-1	243787	310935
14	Kaliachalk-2	163871	211406
15	Kaliachalk-3	214721	284376

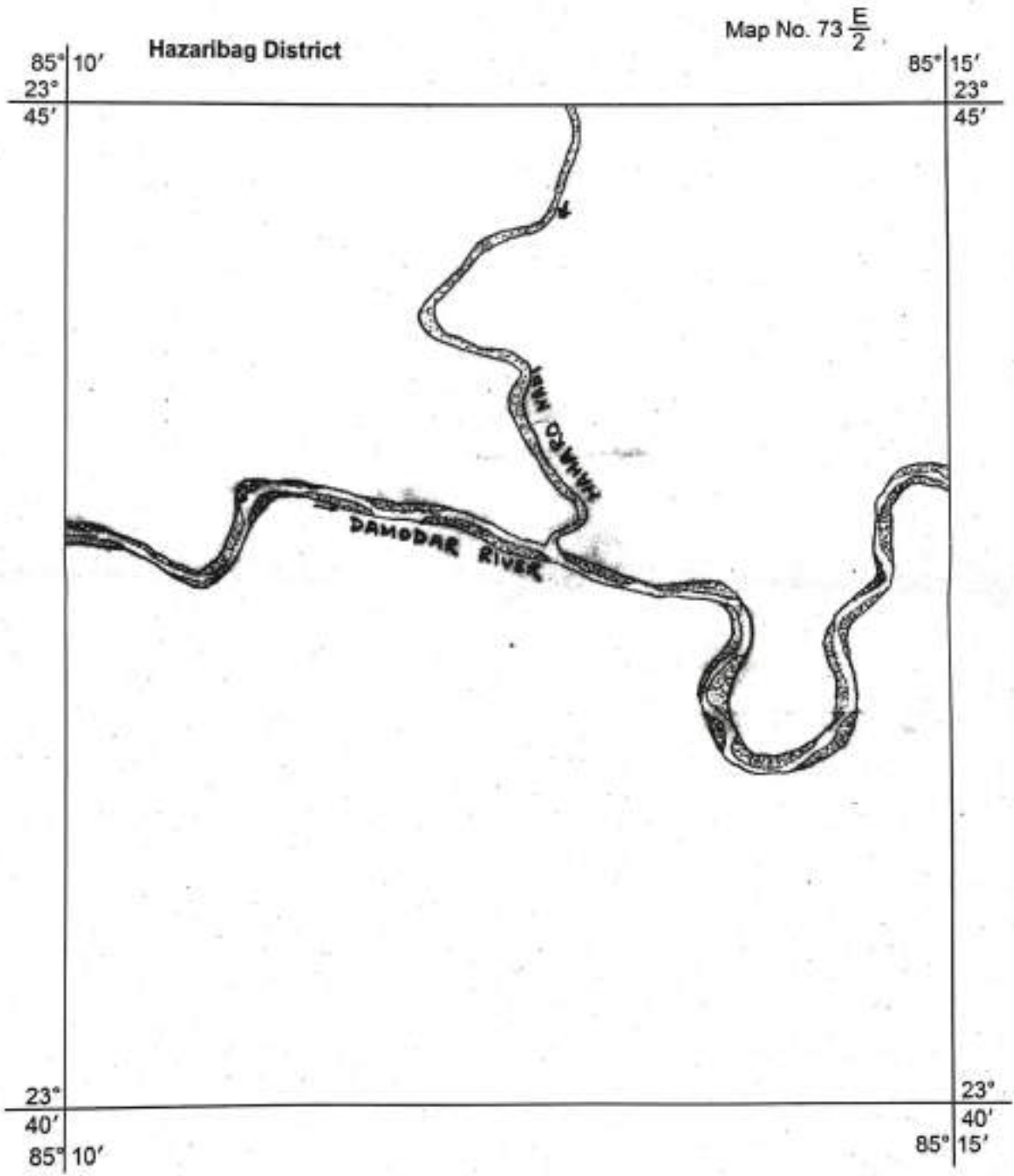
P.T.O.

2. Calculate HPI of selected Developed countries and conclude on the result. 4+1=5

Sl. No.	Countries	Probability at birth of not surviving to age 60 years	People lacking functional literacy Skill (%)	Long term unemployment (%)	Population below 50% of median income (%)
1	Norway	7.90	7.90	0.50	6.40
2	Denmark	9.40	10.40	1.80	5.40
3	Belgium	9.30	18.40	4.60	8.00
4	USA	11.60	20.00	0.04	17.00

3. Laboratory notebook and Viva-voce.  $1\frac{1}{2}+1\frac{1}{2}=3$
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5th Sem (H), DSE-2, Set-I, Fluvial Geomorphology



Map No. 1

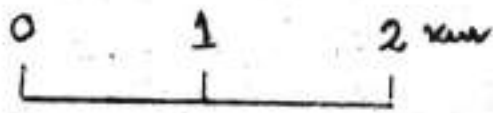
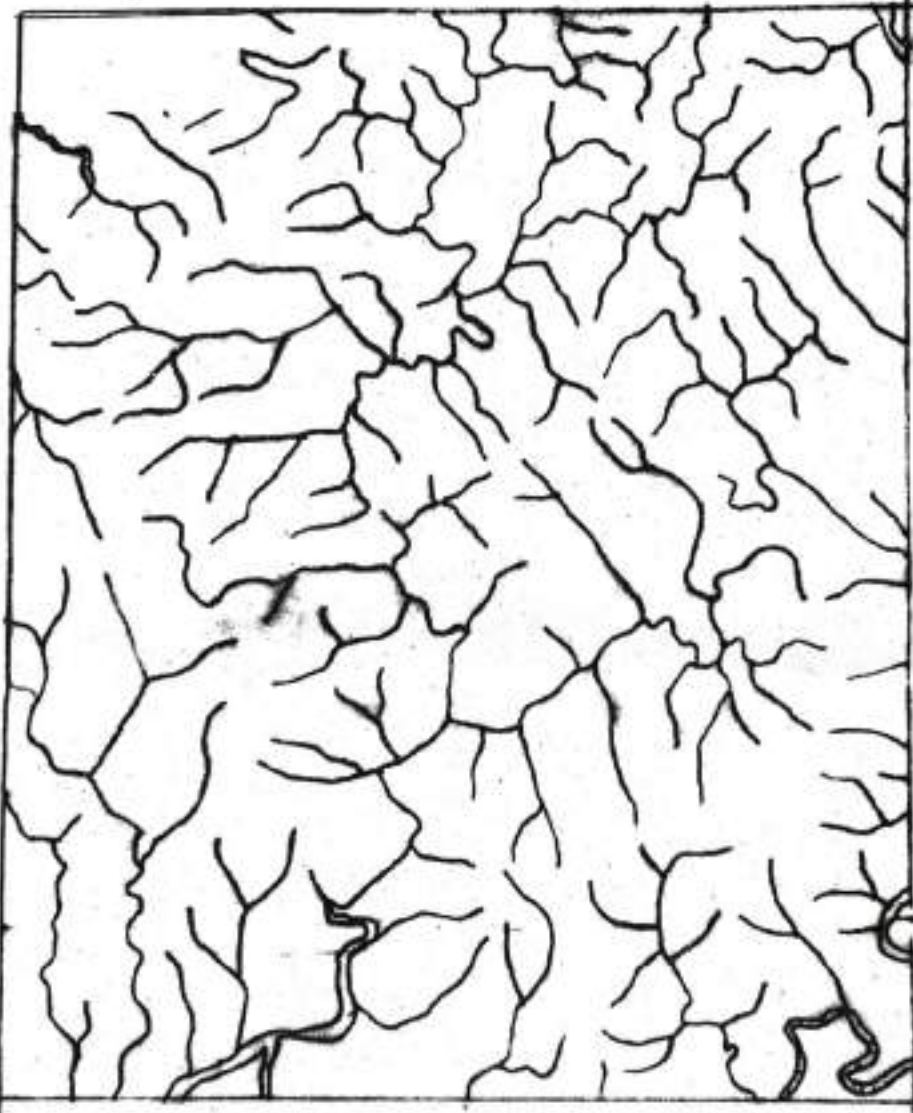
5th Sem (H), DSE-2, Set-I, Fluvial Geomorphology

Map No. 53k/158

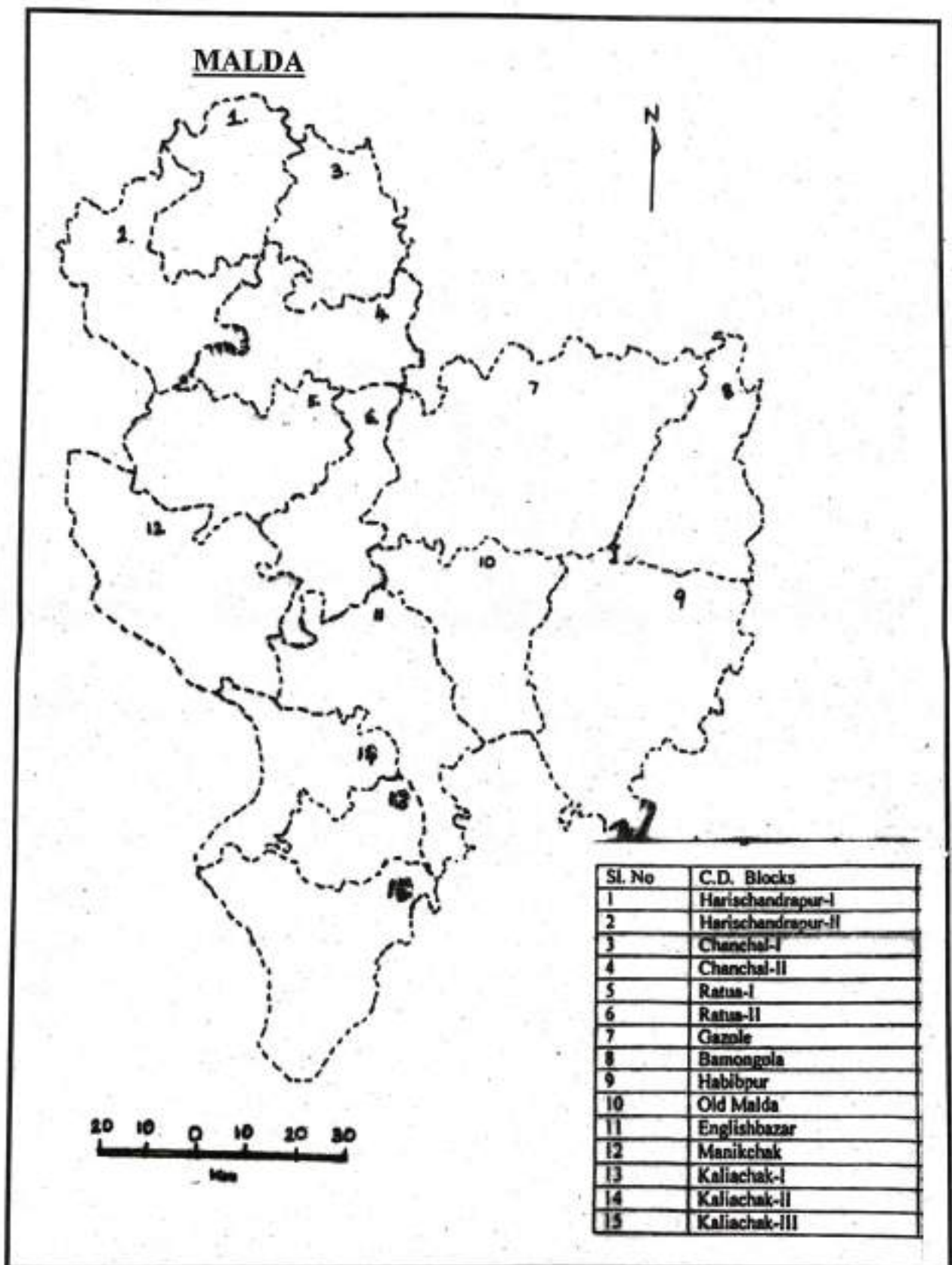
29° 55' 38"  
29° 30'

29° 26' 15"  
78° 52' 30"

29° 26' 15"  
78° 55' 38"



Map No. 2



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**GEOGRAPHY (Honours)**

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

**(Practical)**

**Set - II**

Full Marks : 15

Time : One Hour Thirty Minutes

*The figures in the margin indicate full marks.*

Answer *all* the questions.

**(Fluvial Geomorphology)**

1. Measure the stream ordering (after Strahler) of the Banaili river basin from the given map. Calculate and interpret the bifurcation ratio of the same river basin.

3+3+1=7

2. The total length of stream measured on each grid covering 1 km<sup>2</sup> area on the SOI topomap (63 L/14) has been given in the following table. On that basis, calculate drainage density and create a drainage density map.

2+3=5

P.T.O.



( 2 )

Grid No.	Total Length of the stream (cm)	Grid No.	Total Length of the stream (cm)	Grid No.	Total Length of the stream (cm)
A1	8	B1	0.5	C1	6
A2	5.5	B2	7.5	C2	6
A3	4.5	B3	4.5	C3	2.5
A4	9	B4	13.5	C4	3.5
A5	2.5	B5	6	C5	1

Grid No.	Total Length of the stream (cm)	Grid No.	Total Length of the stream (cm)
D1	7	E1	4.5
D2	13	E2	6
D3	8	E3	7.5
D4	3	E4	4.5
D5	5.5	E5	9.5

**Grid Direction**

Grid No.	A	B	C	D	E
1					
2					
3					
4					
5					

3. Laboratory notebook and Viva-voce.

$$1\frac{1}{2} + 1\frac{1}{2} = 3$$

**(Social & Cultural Geography)**

1. Represent the following data with a suitable Cartographic Technique based on the data given below (Table-1) and interpret it.

Table-1 : Religious structure of some states of India, 2011

Sl. No.	Name of the States	Hindu (%)	Muslim (%)	Christians (%)	Sikhs (%)	Other Religions (%)
1	Punjab	38.49	1.93	1.26	57.69	0.63
2	Uttar Pradesh	79.73	19.26	0.18	0.32	0.19
3	Rajasthan	88.49	9.07	0.14	1.27	1.03
4	Meghalaya	11.53	4.40	74.59	0.10	9.38
5	West Bengal	70.54	27.01	0.72	0.07	1.66
6	Karnataka	84.00	12.92	1.87	0.05	1.16

Source : Census of India, 2011

6+1=7

2. Calculate HPI for the less developed countries given in the following (Table : 2) and comment on it. 4+1=5

P.T.O.

Sl. No.	Countries	Probability at birth of not surviving to the age 40	Adult Literacy Rate	% of people without access to safe water	% of people without access to health service	% of made nourshed children under 5 years of age
1	Ghana	19.25	56	57.15	31.66	23.11
2	Chand	31.25	49	41.95	45.22	25.14
3	Sri Lanka	16.57	61	67.21	32.20	12.30
4	Afghanisthan	25.23	57	48.65	44.55	18.40

3. Laboratory notebook and Viva-voce.

$1\frac{1}{2} + 1\frac{1}{2} = 3$

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5th Sem (H), DSE-2, Set-II (Q . No. 1), Social & Cultural Geography

