2024

M. A. Third Semester (CBCS) Examination

Geography

Course - CC 3.1

(Social and Cultural Geography)

Full Marks—40 Time—2 Hours

The figures in the right hand side margin indicate marks.

Answer ***any four*** questions selecting ***one*** from each unit.

Unit-I

(Concepts in Social Geography)

1. Highlight the position of social geography in the realm of social sciences. Compare social geography and sociology. 5+5=10

2. Critically evaluate the theory of T. Adorno. What are the relations of social justice and pathology? 6+4=10

Unit-II

(Social Structure, Process and Behaviour)

3. State the different types of social systems. Explain the ethnographic structure of society citing examples of India. 4+6=10

4. Discuss how region can be considered as a social unit. Define city region. 7+3=10

Unit-III

(Cultural Geography)

5. Discuss the evolution of Cultural Geography as a scientific discipline. 10

6. Elucidate the various elements of culture highlighting religion and customs as an intigral part of Indian culture. 6+4=10

Unit-IV

(Cultural Dynamics)

7. Explain the role of technology in the evolution of culture. What is meant by 'acculturation'? 8+2=10

8. Relate social transformation and cultural status. Highlight the concept of cultural globalization. 5+5=10

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2024

M. A. Third Semester (CBCS) Examination

Geography

Course - CC 3.2

(Region and Regional Planning)

Full Marks—40 Time—2 Hours

The figures in the right hand side margin indicate marks.

Answer ***any four*** questions selecting ***one*** from each unit.

Unit-I

(Concept and Theories)

1. Distinguish the concept of regionalisation from region. Discuss the characteristics of Planning regions. What do you understand by Problem areas or depressed regions? 3+5+2=10

2. Discuss the process of unbalanced economic growth with reference to the model of Friedman. What do you understand by periurbanisation? 7+3=10

Unit-II

(Region and Regionalization)

3. What are natural regions? In the context of India, using any one method of regionalisation, delineate the major natural regions of the country. 3+7=10

4. Discuss the nature of any two industrial regions of India. What are adhoc regions? 7+3=10

Unit-III

(Regional Planning in India)

5. Distinguish Macro, Meso and Micro regions from each other. In India, how does Panchayati Raj system enable the framing of rural development plans? 6+4=10

6. What is a watershed? Highlight the salient features of watershed management in India. Identify a few drought prone areas of India. 3+5+2=10

Unit-IV

(Regional Inequality and Dispcoity)

7. How are regional imbalances caused? What are the various indices to measure Regional Disparity? Identify two backward regions of India. 4+4+2=10

8. What is a fallow land? How is it different from a wasteland? What are the major problems of rural land use planning in West Bengal? How does environmental issues affect regional planning? 2+1+4+3=10

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Geography

Course - CEC 3.1

Full Marks—40 Time—2 Hours

The figures in the right hand side margin indicate marks.

Answer ***four*** questions selecting ***one*** from each unit.

Environmental Geography

Unit-I

(Concept)

1. How have the perceptions of environment changed in the history of human civilization? Explain the interrelationship between man and earth. 8+2

2. What is uniformatarianism? Discuss the basic principles of environmental sustainability and exploitation of resource by man. 2+8

Unit-II

(Atmospheric Change and Biosphere)

3. Explain the spatio-temporal impacts of climate in zoning of the earth's surface. Why is it important to classify ecological regions? 6+4

4. Discuss the impacts of climate change on technological innovations. How humans need to conserve the environment? 6+4

Unit-III

(Environmental Degradation and Hazards)

5. Elaborate the forecasting, consequences and mitigative measures of floods in South Bengal. 10

6. What do you understand by environmental refugees? Discuss the importance of social exclusion and marginalization in environmental conservation. 4+6

Unit-IV

(Global Environmental Issues)

7. How can global crisis of oil and petroleum resources be managed? State the distribution of resource crisis affected nations of the world with reasons. 4+6

8. What are the impacts of climate change on human health? How has it affected the economic and social developments? 5+5

Geography of Urban Development

Unit-I

(Evolution of Urban Regions)

1. Discuss the different phases in the evolution of urban geography. Write a short note on the interdisciplinary nature of urban geography. 7+3=10

2. State the characteristics of modern industrial cities. Comment on the impact of globalization in any mega city of India. 6+4=10

Unit-II

(Urban Structure and its Transformation)

3. Elaborate how urban economy is undergoing the process of restructuring in present times. What is counterurbanisation? 8+2=10

4. Explain the interlinkage between good governance and implementation of social justice in cities. How physical use of land changes over time in cities. 6+4=10

Unit-III

(Urban Contemporary Issues)

5. State how the process of metropolisation works. What is a Smart city? 8+2=10

6. Explain the concept of sustainable city. Write a note on Gated Communities in cities. What is 'Third space'? 4+4+2=10

Unit-IV

(Urban Government and Development)

7. State how elected and bureaucratic stakeholders work together to ensure good governance of urban centres. What is the difference between 'Statutory' and 'Census' towns in India? 6+4=10

8. Elaborate on the changing priorities of urban governance over space and time. What is a citizen convention? 8+2=10

Internal Assessment-10 Marks

Day-I

BR

2024

M. A. Third Semester (CBCS) Examination

Geography

Course - CC 3.3

(Practical)

(Remote Sensing and GIS)

Full Marks—40 Time—3 Hours

The figures in the right hand side margin indicate marks.

1. What is georeferencing? Discuss Landsat Mission with respect to sensor specifications. How does OLI sensor differ from TIRS? Define a multispectral sensor. 2+4+2+2=10

2. What is buffer analysis? Mention its types and significance. What is query and how does it help in fetching information from attribute? Define a shape file. 2+3+3+2=10

3.(a) Define waypoint. At what angle the GPS Satellites are orbiting?

[P. T. O.]

(b) Plot the given GNSS survey data :

Sl. No.	Way Point	Easting in m	Northing in m
1	A	622633	2455035
2	B	622301	2455047
3	C	622049	2455064
4	D	622053	2455338
5	E	622047	2455553
6	F	622038	2456030
7	G	622667	2455348
8	H	622652	2455177
9	I	622642	2455052
10	J	622634	2455035

1+1+8=10

4. Laboratory Note-Book and Viva-Voce. 10

Day-II

BR

2024

M. A. Third Semester (CBCS) Examination

Geography

Course - CC 3.3

(Practical)

(Remote Sensing and GIS)

Full Marks—40 Time—3 Hours

The figures in the right hand side margin indicate marks.

1. Distinguish between supervised and unsupervised image classification techniques. What is meant by nearest neighbour in the method of image classification? What are the advantages of ground truthing in supervised image classification? Discuss them in brief. 4+3+3=10

2. What are the different processes involved in the conversion from raster to vector? What are the applications of vector overlay and raster overlay in geospatial research? 5+5=10

3. What are the different segments of GPS? Discuss them in brief with suitable examples.

   A GPS satellite orbits at 20,000 km attitude from ground. Radius of the earth is given as 6371 km. The speed of light is 299792 km/s. Calculate the travel time of the signal from the satellite to a receiver on earth. 6+4=10

4. Laboratory Note-Book and Viva-Voce. 10

2024
M. A. Third Semester (CBCS) Examination
Geography
Course - CEC 3.2
(Practical)
[Geography of Urban Development]

Full Marks—40 Time—3 Hours

The figures in the right hand side margin indicate marks.

Unit-I

1. Find out the inequality in the distribution of SC population in relation to total population. Calculate the Gini-coefficients and interpret it. 8+2=10

Sl. No.	Name of Block	Total Population (2011)	SC Population (2011)
1	Haldibari	103969	63609
2	Mekliganj	155250	110595
3	Mathabhanga-I	218191	150056
4	Mathabhanga-II	227397	147623
5	Cooch Behar-I	326558	129873
6	Cooch Behar-II	343901	154656
7	Tufanganj-I	248595	115000

Sl. No.	Name of Block	Total Population (2011)	SC Population (2011)
8	Tufanganj-II	186726	100378
9	Dinhata-I	286269	125873
10	Dinhata-II	244066	106859
11	Sitai	110333	72924
12	Sitalkuchi	185353	101009

Unit-II

2. Differentiate between supervised and unsupervised classification. Explain with examples the utilities of buffer analysis in urban areas. Elucidate how LULC can be utilised in delineating urban expansion. 4+3++3=10

Unit-III

3. What is ethnography? Critically analyse the merits and demerits of participant observation. Compare and contrast between interview and FGDs. 2+4+4=10

4. Practical Note Book and Viva-Voice. 10

Day-I

BR

2024

M. A. Third Semester (CBCS) Examination

Geography

Course - CEC 3.2

(Practical)

[Environmental Geography]

Full Marks—40 Time—3 Hours

The figures in the right hand side margin indicate marks.

Unit-I

(Experiment and Measurement)

1. A surveying team used a dumpy level to determine the elevations along a proposed centerline for a short road construction project. The instrument was setup at two different locations (Setup 1 and Setup 2). The following staff readings were taken :

Station	Distance (in m)	Backsight (BS)	Intermediate Slight (IS)	Foresight (FS)	Remarks
A	0	1.455 m	-	-	BM (Elevation = 100.00 m)
B	5	-	0.870 m	-	
C	10	-	1.635 m	-	
D	15	-	-	2.110 m	
E	20	0.340 m	-	-	Change point
F	25	-	1.225 m	-	
G	20	-	0.580 m	-	
H	35	-	-	1.950 m	

Calculate the reduced levels (mm) with relevant check and draw the profile with proper scale and label. 5+7

[P. T. O.]

Unit-II
(Environmental Mapping and Analysis)

2. Identify and delineate the boundary of a drainage basin of around 25 sq Km within the given toposheet. Clearly mark the watershed (drainage divide) on the map. Within the demarcated drainage basin, identify and order the streams according to the Strahler's stream order system. Clearly label each stream segment with its order (1st order, 2nd order, 3rd order, etc.) on the toposheet. 5+5.

Unit-III
(Environmental Survey and Analysis of Data and Action)

3. Prepare a questionnaire with a mix of bi-ended, open-ended, and multiple-choice questions specifically designed for residents of a flood-affected region in West Bengal, potentially impacted by water management practices of the Damodar Valley Corporation. The questionnaire should aim to gather information about their experiences with flooding, their perceptions of the DVC's role and their preparedness for future events. 8

4. Practical Note Book and Viva-Voice. 5+5=10

Internal Assessment-10 Marks

2024

M. A. Third Semester (CBCS) Examination

Geography

Course - CEC 3.2

(Practical)

[Environmental Geography]

Full Marks—40 Time—3 Hours

The figures in the right hand side margin indicate marks.

Unit-I

(Experiment and Measurement)

1.(a) Write the chief characteristics of the following rocks & minerals :

- ★ Gabbro
- ★ Limestone
- ★ Gneiss
- ★ Chalcopyrite
- ★ Kaolin
- ★ Quartz

(b) Determine the R. L. from the following table and also represent the calculated RLs by a figure. 6+4=10

Table-1

Instrument at	Staff station	Distance on Ground (m)	Staff Reading (m)			Remarks
			B.S.	I.S.	F.S.	
A	a	0	0.685	-	-	Bench Mark at Station A = 53m
	b	10	-	0.790	-	
	c	20	-	0.654	-	
	d	30	-	0.610	-	
	e	40	-	0.692	-	
	f	50	-		0.720	

[P. T. O.]

Unit-II

(Environmental Mapping and Analysis)

2.(a) What is stream ordering and why is it important?

(b) Prepare a stream ordering map after Strahler from the given river basin map.

(c) Compute Bifurcation ratio from the map and state what does it indicate?

(d) Prepare a map to calculate & interpret the zone of influence by breaking point analysis of Bardhaman Town, 2011 Table 2 (Map attached).

2+2+2+(3+1)=10

Table-2

Name of Town	Population	Distance from Bardhaman Town in cm	Breaking Point Distance in cm
Bardhaman	285602	-	
Memari	36207	3.5	
Kalna	52182	6.1	
Dainhat	22597	6.5	
Katowa	71589	6.6	
Guskara	31867	3.7	
Jamuria	129484	12.9	
Ranigunj	111116	11.2	
Khandaghosh	170331	2.2	

Unit-III
(Environmental Survey and Analysis of Data and Action)

3.(a) Prepare a questionnaire with double and multiple option answer types for people's perception on significance of green spaces in metropolitan cities.

(b) Calculate the regression from the given table and intrepret it. 6+4=10

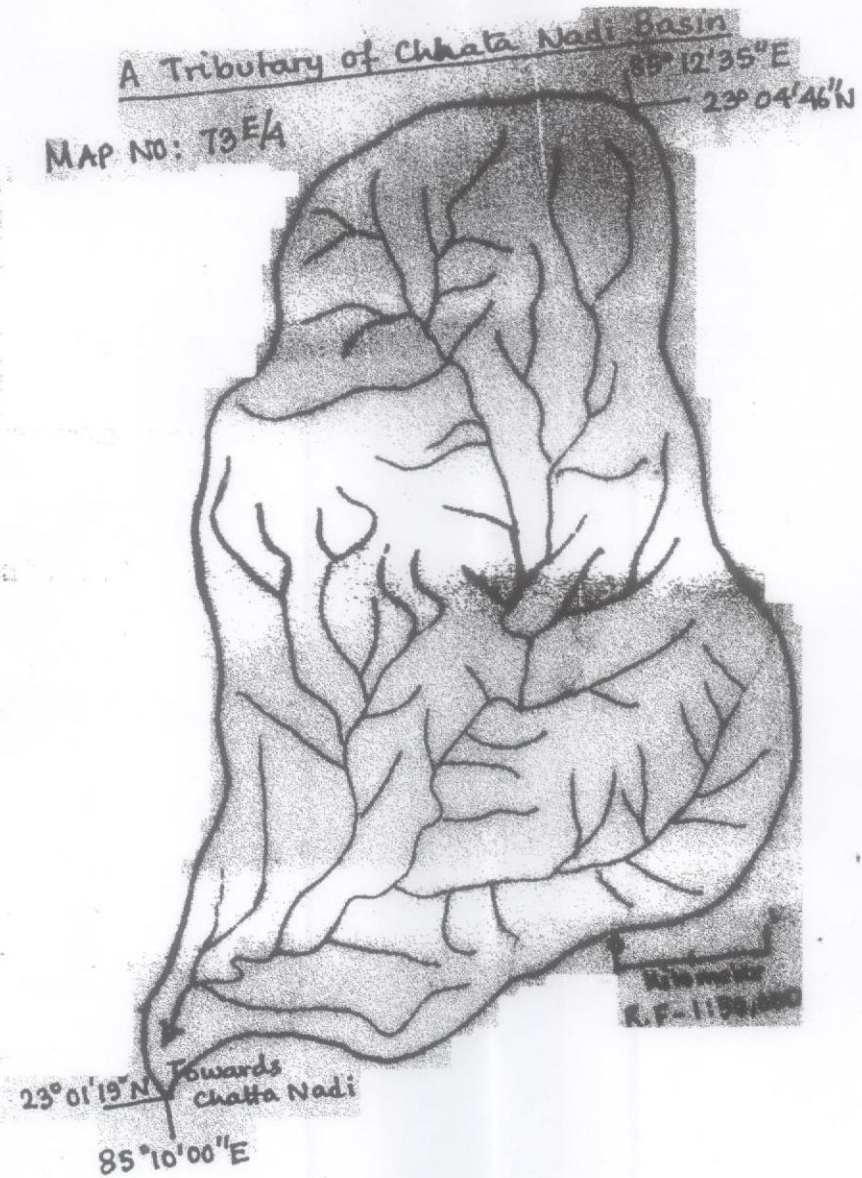
Table-3

Relative Relief in (m)	Ropad Density in (km%km^2)
890	1
290	1.7
580	0.9
678	0.8
40	2.25
60	2.1
130	1.8
120	1.95
110	2.05
610	0.85

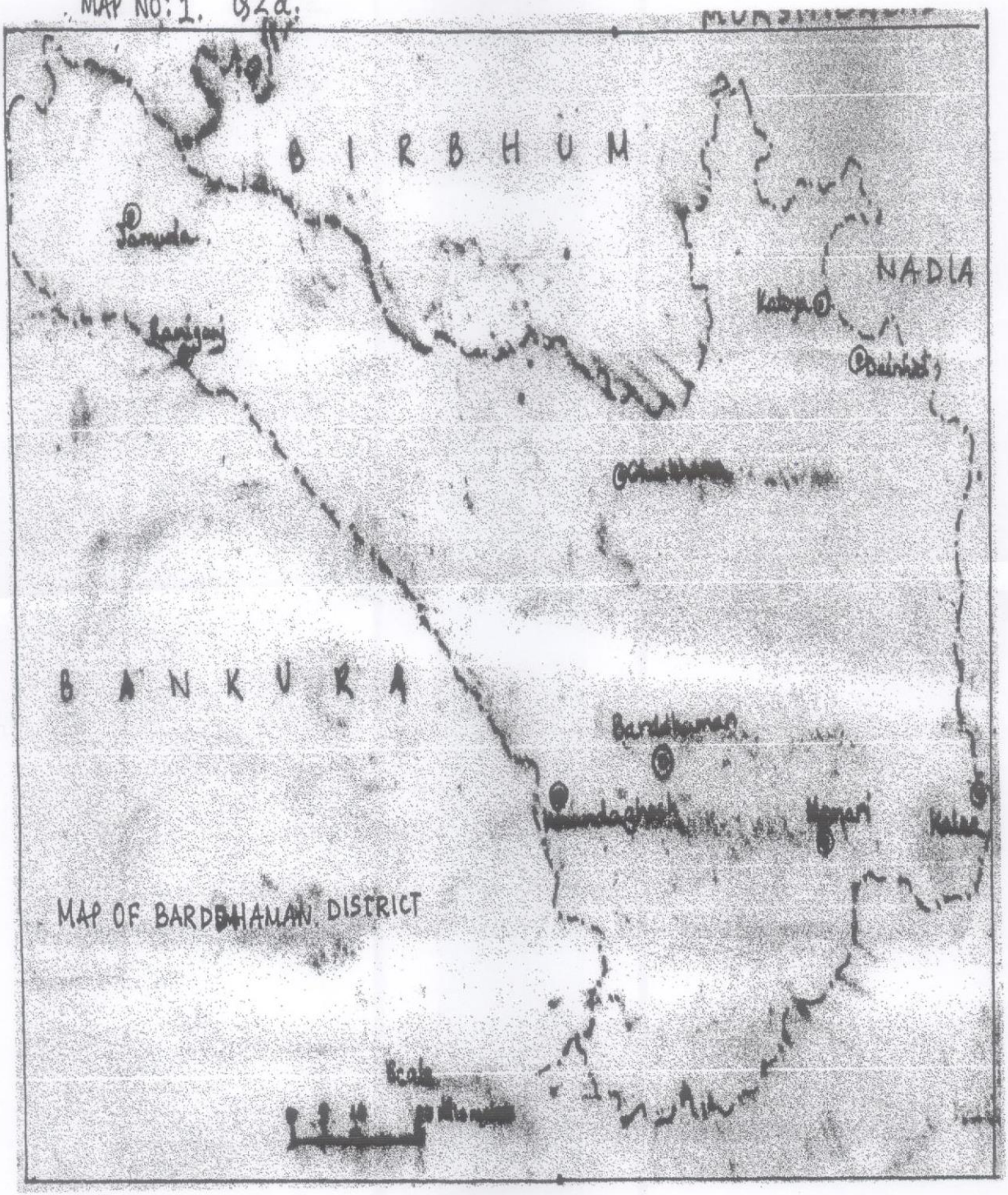
4. Laboratory Note Book and Viva-Voice. 10

A Tributary of Chhata Nadi Basin

MAP NO: 73E/4



MAP NO: 1. 02d.


BIRBHUM
NADIA
BANKURA
Bardhaman
MAP OF BARDHAMAN DISTRICT