2020

GEOGRAPHY — HONOURS — PRACTICAL

Paper : DSE-A-1P

(Fluvial Geomorphology)

Full Marks : 30

The figures in the margin indicate full marks.

1. (a) On a Survey of India toposheet of R.F. 1:50,000, lengths of a river reach between two points (A and B) have been measured using a rotameter and ruler as given below :

   Straight line distance = 12.5 cm

   Channel length = 31.0 cm

   Find out the sinuosity index.

   What is the degree of sinuosity?

   (b) Describe the steps for measurement of eroded area due to river bank erosion using maps of two different years. (2+1)+5

2. Find the flood frequency of the River Desupa when the flood causing discharge is 1512 cumecs. Draw and interpret the graph. 7+2

Year	Discharge in cumecs	Year	Discharge in cumecs
1951	1090	1961	348
1952	1580	1962	804
1953	487	1963	328
1954	719	1964	245
1955	140	1965	140
1956	1583	1966	149
1957	1642	1967	1651
1958	1586	1968	716
1959	218	1969	286
1960	623	1970	671

3. Determine the roundness and the roundness index in per cent on the basis of the table given below and classify them accordingly. 2+2+2+2

Sample ID	Long Axis in cm	Short Axis in cm	Intermediate Axis in cm	Smallest radius in cm
A	5.14	2.20	1.28	0.61
B	4.62	1.80	1.88	0.87
C	2.68	2.10	1.41	0.66
D	4.70	2.00	1.20	0.70

4. Evaluation of Laboratory Notebook. 5

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2020

GEOGRAPHY — HONOURS — PRACTICAL

Paper : DSE-A-2P

(Climate Change : Vulnerability and Adaptations)

Full Marks : 30

The figures in the margin indicate full marks.

1. (a) From the given data draw a graph showing the average of the maximum and the minimum temperatures recorded at Tadong (Sikkim) during 2001-2010.

   (b) Analyse the trend with the help of 3-year moving averages.

   (c) Interpret the graph. 9+4+2

Year	Temperature Min. (°C)	Temperature Max. (°C)
2001	14.67	23.40
2002	14.66	23.21
2003	14.33	22.85
2004	15.56	23.03
2005	14.90	23.18
2006	14.67	23.81
2007	15.04	23.31
2008	14.90	23.12
2009	15.58	23.83
2010	14.96	23.50

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2. Compare the annual variability of rainfall of the following stations (**A** and **B**) with the help of coefficient of variation.

Which station shows more consistent rainfall? 9+1

Year	Annual Rainfall (mm)	
	A	**B**
2002	262.00	1897.30
2003	1084.00	1400.50
2004	489.50	1651.78
2005	976.00	1475.21
2006	482.50	1926.11
2007	447.90	1672.01
2008	969.50	2032.50
2009	344.00	1657.30
2010	923.00	1522.80
2011	895.00	1633.80

3. Laboratory Notebook. 5

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2020

GEOGRAPHY — HONOURS — PRACTICAL

Paper : DSE-B-5P

(Cultural and Settlement Geography)

Full Marks : 30

The figures in the margin indicate full marks.

[Representative diagrams are to be made without maps]

1. Draw proportional squares to represent household distribution in the CD blocks of Birbhum district, West Bengal. Interpret the diagram. 13+2

Sl No.	Name of CD Block	Total Number of Households (2011)
1	Muraroi I	41601
2	Muraroi II	52059
3	Nalhati I	48318
4	Nalhati II	31058
5	Rampurhat I	44263
6	Rampurhat II	49558
7	Mayureswar I	37943
8	Mayureswar II	31171
9	Mohammad bazar	36344
10	Rajnagar	18084
11	Suri I	25792
12	Suri II	20808
13	Sainthia	46552
14	Labhpur	47005
15	Nanoor	51305

2. Show the spatial distribution of some selected languages in some states of India from the following table using a suitable technique. Interpret it. 8+2

Type of Language with number of speakers, 2011

Name of State	Kannada	Malayalam	Telugu	Tamil
Karnataka	40651090	61147	3569400	2110128
Andhra Pradesh	534144	774057	70667780	713848
Kerala	86995	32413213	35380	502516
Tamil Nadu	1286175	726096	4234302	63753997

3. Evaluation of Laboratory Notebook. 5

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2020

GEOGRAPHY — HONOURS — PRACTICAL

Paper : DSE-B-6P

(Social Geography)

Full Marks : 30

The figures in the margin indicate full marks.

[Representative diagrams are to be made without maps]

1. Prepare cartograms to show distribution of religion for the selected states of India, on the basis of the data provided in the Table below. Interpret the map. 6+2

State	Hindu	Muslim	Christian	Buddhist
Kerala	8,873,644	4,621,685	2,385,605	1,528
Odisha	3,930,341	911,670	1,161,708	13,852
Meghalaya	345,078	130,399	2,213,027	9,864

2. Draw a suitable cartogram to represent the Total Admissions and Total Discharges of patients in hospitals of selected districts of West Bengal. 6

Districts	Total Admission	Total Discharge
Jalpaiguri	94368	57120
Haora	50366	37527
Pachim Medinipur	30575	29130

3. Analyze the various reasons of rural to urban migration in selected districts of West Bengal, with the help of suitable cartograms. 6

Districts	Work		Education		Marriage	
	Male	Female	Male	Female	Male	Female
Maldah	21,448	3,207	1571	933	10,263	5,96,264
Bankura	15,204	3,378	1898	1012	13,484	7,88,775
Paschim Medinipur	28,266	7,615	3428	1689	26,746	11,90,196

4. Prepare a checklist for Social Impact Assessment for a Hydro-Electric Power Project in the Himalayas. 5

5. Evaluation of Laboratory Notebook. 5

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