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14 (GGY-4) 2104 (P&S, RD IND, NE-P)

2025

GEOGRAPHY

Paper: GGY-2104

**Population and Settlement Geography and
Regional Development of India and N. E. India (Practical)***Full Marks: 80*

Time: 5 hours

*The figures in the margin indicate
full marks for the questions.***Unit I**

Q1. Using the following dataset, analyze and show the trend of population growth in India from 1951 to 2011 using the exponential trend method. Based on this model, project the estimated population for the year 2031 and 2041. Provide a brief interpretation of the results obtained.

4+4+2+2= 12

Trend of Population in India (1951-2011)

Year	Total population
1951	361088000
1961	439235000
1971	548160000
1981	683329000
1991	846421000
2001	1028737000
2011	1210855000

Q2. Calculate and show the spatial pattern of Population concentration in the Brahmaputra valley by applying a meaningful concentration index. Further interpret the results from geographic perspectives.

5+5+2=12

Sl.No	District Name	Area (Km ²)	Population (as per 2011 Census)
1	Kokrajhar	3296	887142
2	Dhuburi	2176	1949258
3	Goalpara	1824	1008183
4	Barpeta	2282	1693622
5	Morigaon	1551	957423
6	Nagaon	3973	2823768

7	Sonitpur	5204	1924110
8	Lakhimpur	2277	1042137
9	Dhemaji	3237	686133
10	Tinsukia	3790	1327929
11	Dibrugarh	3381	1326335
12	Sivsagar	2668	1151050
13	Jorhat	2851	1092256
14	Golaghat	3502	1066888
15	Bongaogaon	1093	738804
16	Chirang	1923	482162
17	Kamrup	3105	1517542
18	Kamrup (M)	955	1253938
19	Nalbari	1052	771639
20	Baksa	2457	950075
21	Darrang	1585	928500
22	Udalguri	2012	831668

Q.3 Carry out the necessary computation from the given map (supplied to you) to determine the settlement pattern using Nearest Neighbour Analysis Statistics. Further interpret your findings. 9+3=12

Unit II

Q.4 Using a suitable quantitative technique, perform necessary computations to assess the level of socio-economic development (based on positive and negative indicators) across the states of North-East India. Based on your analysis, interpret the relative development levels and highlight any spatial disparities observed in the region 5+5+2=12

State	Literacy (%)	No. of Schools (Per Lakh Population)	Electrified Villages (%)	No. of Motor Vehicle (Per Ten thousand Population)	Crime rate (in %)	Road Density (km/100 km ²)
Arunachal Pradesh	65.4	230	75.5	1049	4.7	25.74
Assam	72.2	167	96.1	507	4.2	308.26
Manipur	79.2	158	86.3	805	2.9	85.7
Meghalaya	74.4	327	86.3	593	2.9	53.43
Mizoram	91.3	348	93.5	847	2.4	46.53
Nagaland	79.6	128	70.1	1380	2.3	205.96
Tripura	87.2	120	92.9	511	4.4	322.07

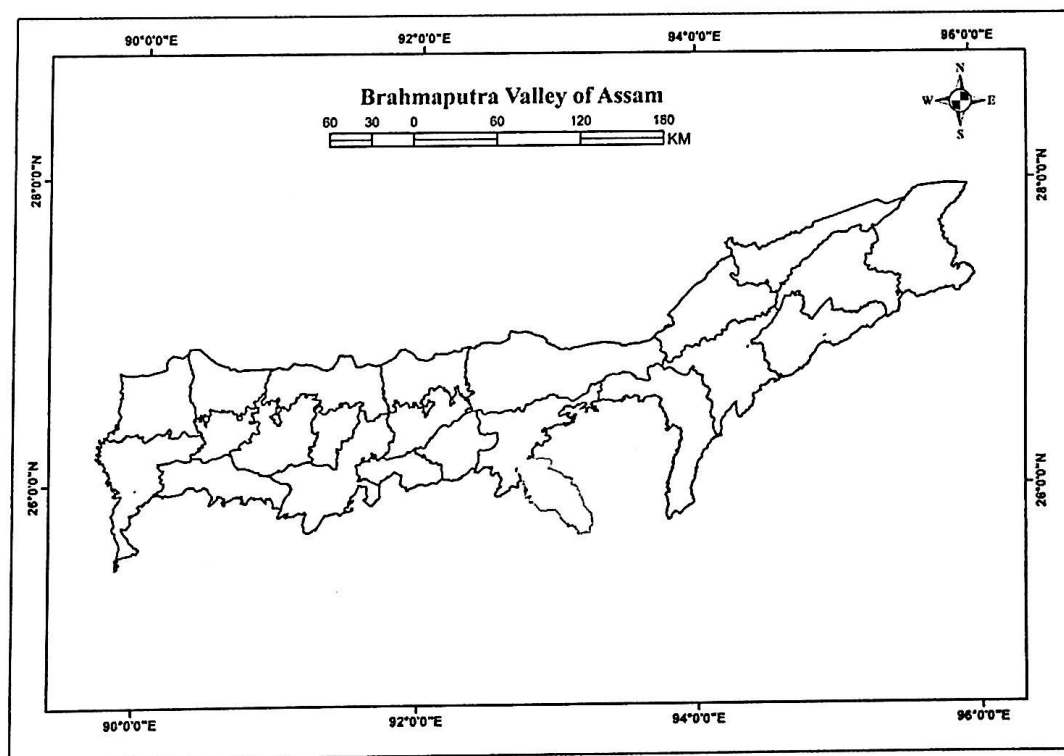
Q.5 Analyze the road network to determine the degree of road connectivity and centrality of selected nodes of Sonitpur district of Assam (Supplied to you) using appropriate indices. Further interpret the spatial pattern of connectivity in the district from your findings.

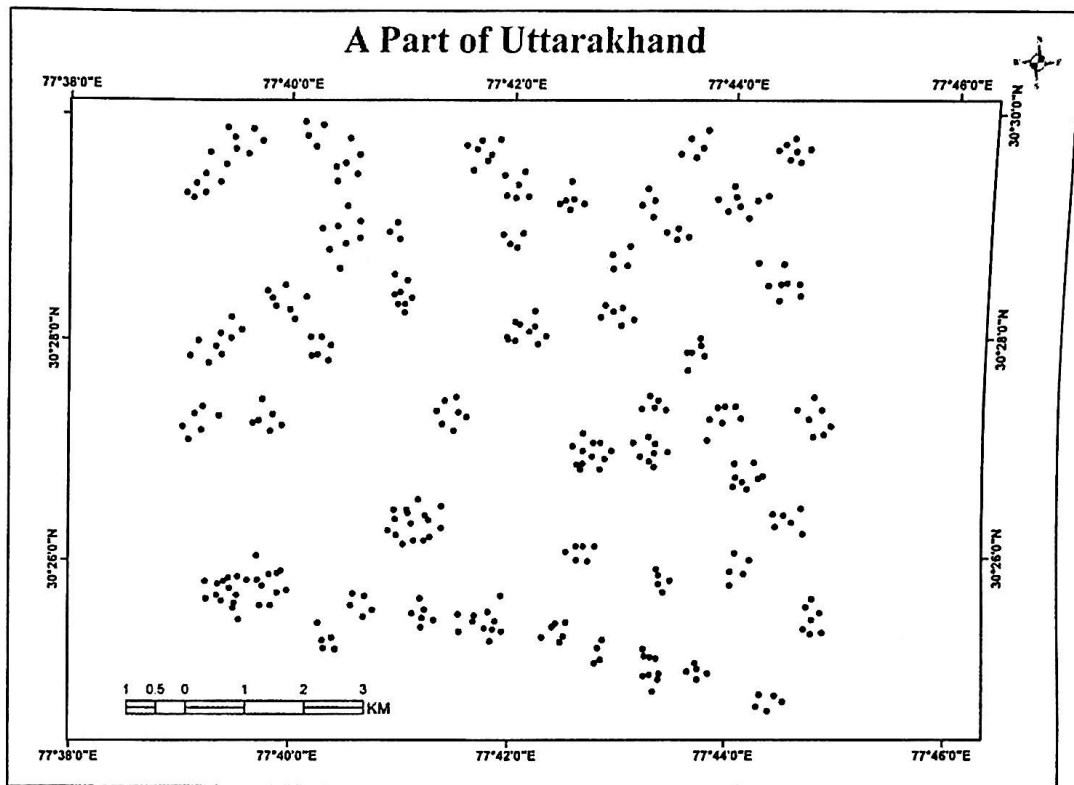
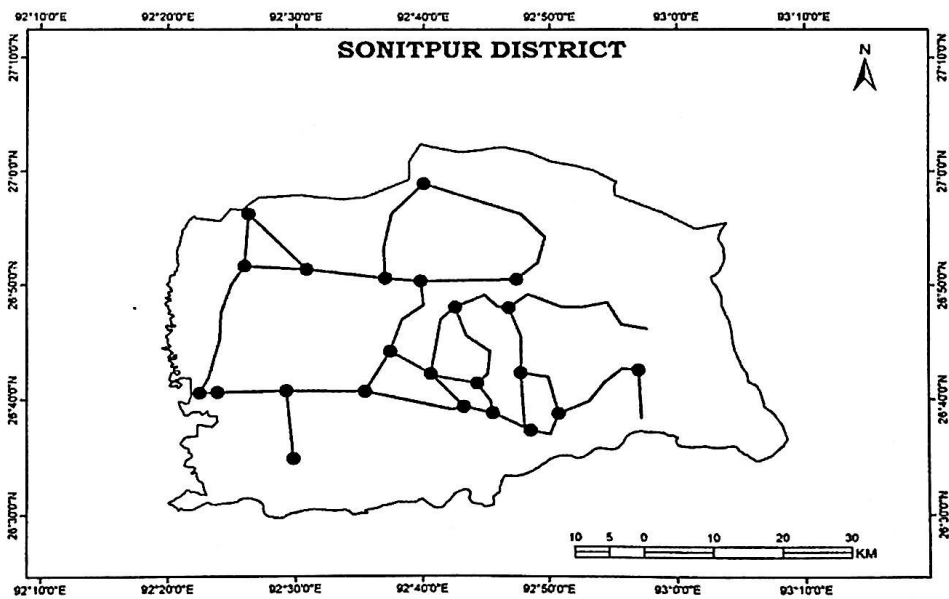
7+5=12

Unit III

Q6. Field report	10
Q7. Practical note book	5
Q8. Viva-voce	5

Map to be used for Q.2



Map to be used for Q.3Map to be used for Q.5

N.B: Internal Examiners are requested to supply the map of N.E India for Q.4