



SMRJ Government College, Siwani (Bhiwani)

(Affiliated to Chaudhary Bansi Lal University, Bhiwani)

Session: 2024-25

Lesson Plan

(Department of Geography)



Teacher: Mr. Rahul
Class: B.A Geography Hons. 2nd Year
Semester: 3rd
Maximum Marks: 100
End Term Exam Marks: 80

Course Type & Title: Geography of India
Course Code: 21 UGEOH-302
Credits: 04
Internal Assessment Marks: 20

Course Outcomes:

Through this course following outcomes will be: -

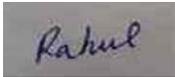
- Students will be understanding of physical, climatic, human and economic characteristics of India
- The students will learn about important resources available in India
- They will understand the consequences of green revolution in India.

Sr. No.	Week/Month, 2024	Unit/ Topic/ Chapter to be covered	Assignment/ Test/ Remarks, if any
1	22.07.2024 – 27.07.2024	Familiar with Syllabus	
2	29.07.2024 – 03.08.2024	Geology and Structure, Physiographic Divisions;	
3	05.08.2024 – 10.08.2024	Drainage System; Climate; Climatic Regions;	
4	12.08.2024 – 17.08.2024	Soil; Natural Vegetation, Agro-climatic Regions.	
5	19.08.2024 – 24.08.2024	Population: Distribution its Determinants;	
6	26.08.2024 – 31.08.2024	Population Growth; Population Composition: Sex ratio,	
7	02.09.2024 – 07.09.2024	Literacy, Work Force, Caste, Language, Religion; Old-Age Population.	Assignment
8	09.09.2024 – 14.09.2024	Agricultural: Food Crops, Cash Crops,	
9	16.09.2024 – 21.09.2024	Green Revolution, Agriculture through Five Year Plans;	
10	23.09.2024 – 28.09.2024	Agricultural Regionalization,	
11	30.09.2024 – 05.10.2024	Minerals: Production and Distribution of Metallic Resources;	

12	07.10.2024 – 12.10.2024	Energy resources: Conventional and Non-Conventional; Industries: Mineral and Agro-based Industrial Regions,	
13	14.10.2024 – 19.10.2024	Industrial Policy, SEZ, Transport and Communication	Test
14	21.10.2024 – 26.10.2024	India as a Geographical Unit; Concept of Region: Scheme of Regionalization:	
15	04.11.2024 – 09.11.2024	Physiographic (O.H.K. Spate and R.L. Singh);	
16	11.11.2024 – 16.11.2024	Socio-Cultural (Sopher and Ahmed)	
17	18.11.2024 – 23.11.2024	Economic & Planning (Nath, Bhat & Rao, Sengupta).	

Recommended Books/ E resources/ LMS:

- 1. Deshpande, C. D. (1992). *India: A Regional Interpretation*. New Delhi: Northern Book Depot.**
- 2. Gautam, A. (2009). *Advanced Geography of India*. Allahabad: Sharada Pustak Bhawan.**
- 3. Husain, M. (1992). *Geography of India*. New Delhi: Tata McGraw Hill Education.**
- 4. Khullar, D.R. (2000). *India: A Comprehensive Geography*. New Delhi: Kalyani Publishers.**
- 5. Singh, R.L. (1971). *India: A Regional Geography*. Varanasi: National Geographical Society of India.**
- 6. Tiwari, R.C. (2010). *Geography of India*. Allahabad: Prayag Pustak Bhawan.**



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Session: 2024-2025

Lesson Plan

(Department of Geography)

Teacher: Mr. Rahul
Class: MSc. Final
Semester: 3rd
Maximum Marks: 100
End Term Exam Marks: 80

Course Type & Title: Geography & Disaster Management
Course Code: 19 GEO 308
Credits: 04
Internal Assessment Marks: 20

Course Outcomes:

Through this course following outcomes will be: -

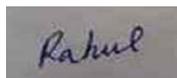
- **theoretical understanding of various disasters, their origin, management and mitigation**
- **understanding for vulnerability and developing community resilience**

Sr. No.	Week/Month, 2024	Unit/ Topic/ Chapter to be covered	Assignment/ Test/ Remarks, if any
1	01.08.2024 – 03.08.2024	Familiar with Syllabus	
2	05.08.2024 – 10.08.2024	Regional physiography, geology, soils, drainage,	
3	12.08.2024 – 17.08.2024	climate, land use and land cover of India	
4	19.08.2024 – 24.08.2024	natural hazards risk prone areas. Hazard risk,	
5	26.08.2024 – 31.08.2024	vulnerability and disaster: concepts and relationships; measuring hazard risks, vulnerability and disasters.	
6	02.09.2024 – 07.09.2024	Regional extreme events in India: earthquakes, floods, drought,	
7	09.09.2024 – 14.09.2024	cyclone, tsunami, landslides, avalanches, snow, rain, and wind storms.	
8	16.09.2024 – 21.09.2024	Disaster magnitude and impacts: case study/ examples from recent disasters.	Assignment
9	23.09.2024 – 28.09.2024	Earthquake disaster vulnerability assessment	
10	30.09.2024 – 05.10.2024	Flood disaster zonation and vulnerability assessment	
11	07.10.2024 – 12.10.2024	Landslides and avalanches disaster zonation and mapping	

12	14.10.2024 – 19.10.2024	Drought disasters zonation and mapping. Multi hazard risk assessment.	
13	21.10.2024 – 26.10.2024	Understanding manmade disasters, fires and forest fires; nuclear,	Test
14	04.11.2024 – 09.11.2024	biological and chemical disaster, road accident and building collapses	
15	11.11.2024 – 16.11.2024	Regional capacity, preparedness and response; governance and institutions for disaster management	
16	18.11.2024 – 23.11.2024	awareness among people, capacity building	
17	25.11.2024 – 30.11.2024	state disaster management plan.	

Recommended Books/ E resources/ LMS

- 1. Contemporary natural and manmade disaster (2004) Master of disaster mitigation. World institution building programme centre.**
- 2. Disaster management in India- a status report (2004) National disaster management division, ministry of home affairs, Govt of India.**
- 3. Sharma, Vinod K. (1994) Disaster management, NCDM, IIPA, New Delhi.**
- 4. National disaster response plan, (2001) NCDM, New Delhi.**
- 5. Dave, R K. (2018) Disaster management in India: Challenges and strategies**



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Session: 2024-2025

Lesson Plan

(Department of Geography)



Teacher: Mr. Rahul
Class: MSc. Previous
Semester: 1st
Maximum Marks: 100
End Term Exam Marks: 80

Course Type & Title: Geography of India
Course Code: 19 GEO-103
Credits: 04
Internal Assessment Marks: 20

Course Outcomes:

Through this course following outcomes will be: -

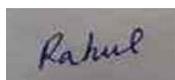
- **Students will be understanding of physical, climatic, human and economic characteristics of India**
- **The students will learn about important resources available in India**
- **They will understand the consequences of green revolution in India.**

Sr. No.	Week/Month, 2024	Unit/ Topic/ Chapter to be covered	Assignment/ Test/ Remarks, if any
1	09.08.2024 – 10.08.2024	Familiar with Syllabus	
2	12.08.2024 – 17.08.2024	India: size, shape and location. Unity in Diversity, Geological structure and relief	
3	19.08.2024 – 24.08.2024	Drainage system, climatic conditions,	
4	26.08.2024 – 31.08.2024	Soil and natural vegetation - Distribution, characteristics and conservation.	
5	02.09.2024 – 07.09.2024	Population distribution and growth,	Assignment
6	09.09.2024 – 14.09.2024	age and sex composition; literacy rate and differentials;	
7	16.09.2024 – 21.09.2024	Ethnic groups; linguistic and religious groups in context of unity in diversity in India.	
8	23.09.2024 – 28.09.2024	Features of Urbanization.	
9	30.09.2024 – 05.10.2024	Economy: main features and problems of Indian agriculture, Green, white, blue and yellow revolutions;	
10	07.10.2024 – 12.10.2024	Regional distribution of major minerals and power resources – iron ore, mica, bauxite, copper,	
11	14.10.2024 – 19.10.2024	coal, petroleum and natural gas	

12	21.10.2024 – 26.10.2024	Industrial Regions; New Industrial Policy; Problems and prospect of transportation with reference to railways, roadways, waterways, airways and pipeline	
13	04.11.2024 – 09.11.2024	Region of India: D. Stamp, Desh Pandey;	Test
14	11.11.2024 – 16.11.2024	Geographic region of India by R.L. Singh, Prakasha Rao & Ashok Mitra;	
15	18.11.2024 – 23.11.2024	Economic & Planning Region of India: P. Sengupta, Economic region of India,	
16	25.11.2024 – 30.11.2024	Resources region of India, Development & Planning region of India. -	

Recommended Books/ E resources/ LMS

1. Deshpande, C. D. (1992). *India: A Regional Interpretation*. New Delhi: Northern Book Depot.
2. Gautam, A. (2009). *Advanced Geography of India*. Allahabad: Sharada Pustak Bhawan.
3. Husain, M. (1992). *Geography of India*. New Delhi: Tata McGraw Hill Education.
4. Khullar, D.R. (2000). *India: A Comprehensive Geography*. New Delhi: Kalyani Publishers.
5. Singh, R.L. (1971). *India: A Regional Geography*. Varanasi: National Geographical Society of India.
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Lesson Plan

(Department of Geography)



Teacher: Mr. Rahul
Class: MSc. Previous
Semester: 1st
Maximum Marks: 100
End Term Exam Marks: 80

Course Type & Title: Statistical Methods in Geography
Course Code: 19 GEO-104
Credits: 04
Internal Assessment Marks: 20

Course Outcomes:

Through this course following outcomes will be: -

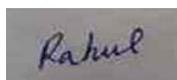
- understanding to the students about the nature and types of data
- the basic understanding of application of statistical tools & technique for analyzing the Spatial Data

Sr. No.	Week/Month, 2024	Unit/ Topic/ Chapter to be covered	Assignment/ Test/ Remarks, if any
1	09.08.2024 – 10.08.2024	Familiar with Syllabus	
2	12.08.2024 – 17.08.2024	Geography and statistics, significance of statistics in geographical studies.	
3	19.08.2024 – 24.08.2024	Descriptive statistics: tabulation and graphical representation of data.	
4	26.08.2024 – 31.08.2024	Measures of central tendency: mean, median and mode	
5	02.09.2024 – 07.09.2024	Partitioned values: Quartiles and deciles. Comparing the mean, median and mode	
6	09.09.2024 – 14.09.2024	Measure of dispersion: Range, quartile deviation, mean deviation	Assignment
7	16.09.2024 – 21.09.2024	standard deviation, coefficient of variation	
8	23.09.2024 – 28.09.2024	Measures of inequality: location quotient and Lorenz curve.	
9	30.09.2024 – 05.10.2024	Bivariate analysis: scatter diagram, correlation analysis	
10	07.10.2024 – 12.10.2024	Spearman's rank correlation and Karl Pearson's correlation coefficient	
11	14.10.2024 – 19.10.2024	Test of significance: Chi-square test, student's T-test, F-test.	

12	21.10.2024 – 26.10.2024	Simple linear regression model: regression equations, construction of regression line,	
13	04.11.2024 – 09.11.2024	computation of residuals and mapping	
14	11.11.2024 – 16.11.2024	Basis of multivariate analysis: correlation matrix, partial and multiple correlations	Test
15	18.11.2024 – 23.11.2024	Measure of composite Indices (Scale Biasness weightage,	
16	25.11.2024 – 30.11.2024	Z Score and Principal Component Analysis).	

Recommended Books/ E resources/ LMS

- 1 Mahmood, A. (2008) Statistical Methods in Geographical Studies. Rajesh Publications, New Delhi.**
- 2. Paul, S. K. (1998) Statistics for Geoscientists: Techniques and Applications. Concept Publishing Company, New Delhi.**
- 3. Gupta, C. B. and Gupta, V. (2009) An Introduction to Statistical Methods. Vikas Publishing House, Delhi.**



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Lesson Plan

(Department of Geography)



Teacher: Mr. Rahul
Class: MSc. Previous
Semester: 1st
Maximum Marks: 100
End Term Exam Marks: 80

Course Type & Title: Cartography and Morphometric Analysis (Theory)
Course Code: 19 GEO-105
Credits: 04
Internal Assessment Marks: 20

Course Outcomes:

Through this course following outcomes will be: -

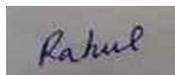
- to provide basic understanding of Cartography, Thematic mapping & to provide the training for spatial Data Analysis.

Sr. No.	Week/Month, 2024	Unit/ Topic/ Chapter to be covered	Assignment/ Test/ Remarks, if any
1	09.08.2024 – 10.08.2024	Familiar with Syllabus,	
2	12.08.2024 – 17.08.2024	Nature and scope of Cartography	
3	19.08.2024 – 24.08.2024	Historical evolution, Development and Recent advancements in cartography,	
4	26.08.2024 – 31.08.2024	Types and characteristics of distribution maps: (i) Chorochromatic (ii) Choroschematic.	
5	02.09.2024 – 07.09.2024	(iii) Isopleth (iv) Choropleth (v) Dot and (vi) Diagrammatic	Assignment
6	09.09.2024 – 14.09.2024	Types and characteristics of statistical diagrams: (i) One dimensional (bar, line), (ii) Two dimensional (circular, rectangular, square),	
7	16.09.2024 – 21.09.2024	(iii) Three dimensional (block, sphere, cube) and (iv) Other diagrams (Snail, pyramid, flow diagram/cartogram).	
8	23.09.2024 – 28.09.2024	Characteristics of graph/diagrams/maps representing climatic data: (i) Rainfall deviation, (ii) Climograph (Taylor and Foster),	
9	30.09.2024 – 05.10.2024	(iii) Hythergraph, (iv) Star/Wind rose diagram (v) Isopleths (vi) Line and bar (vii) polygraph.	
10	07.10.2024 – 12.10.2024	Arrangement, identification and interpretation of topographical sheets of India;	
11	14.10.2024 – 19.10.2024	Delineation of drainage basin and its geographical significance; Profile: Transverse and longitudinal;	

12	21.10.2024 – 26.10.2024	Drainage network analysis: Linear and areal properties;	
13	04.11.2024 – 09.11.2024	Relationship between stream order, number and length.	Test
14	11.11.2024 – 16.11.2024	Relief aspect of drainage basin: (i) area-height curve, (ii) Altimetric frequency curve	
15	18.11.2024 – 23.11.2024	(iii) Hypsographic curve, (iv) Hypsometric integral curve and (v) Clinographic curve	
16	25.11.2024 – 30.11.2024	Development of slope and various methods of its analysis (Wentworth and Smith's method).	

Recommended Books/ E resources/ LMS

- 1. Misra, R.P. and Ramesh, A. (1999) Fundamentals of Cartography. Concept Publishing Company, New Delhi**
- 2. Monkhouse, F.J. and Wilkinson, H. R. (1980) Maps and Diagrams. B. I. Publications, New Delhi.**
- 3. Singh, R. L. (1986) Elements of Practical Geography. Kalyani Publishers, New Delhi.**



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Session: 2024-2025

Lesson Plan

(Department of Geography)

Teacher: Mr. Rahul
Class: MSc. Previous
Semester: 1st
Maximum Marks: 100
End Term Exam Marks: 80

Course Type & Title: Morphometric Analysis (Practical)
Course Code: 19 GEO-107
Credits: 04
Internal Assessment Marks: 20

Course Outcomes:

Through this course following outcomes will be: -

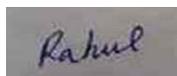
- to provide basic understanding of Cartography, Thematic mapping & to provide the training for spatial Data Analysis.

Sr. No.	Week/Month, 2024	Unit/ Topic/ Chapter to be covered	Assignment/ Test/ Remarks, if any
1	09.08.2024 – 10.08.2024	Familiar with Syllabus,	
2	12.08.2024 – 17.08.2024	Interpretation of toposheets: (a) Physical features and (b) Cultural features	
3	19.08.2024 – 24.08.2024	Delineation of Watershed (All the exercises of morphometry shall be based on delineated watershed)	
4	26.08.2024 – 31.08.2024	Profile Analysis: Transverse and Longitudinal a. Serial Profiles (1) b. Superimposed Profiles (1)	
5	02.09.2024 – 07.09.2024	c. Composite Profiles (1) d. Projected Profiles (1) e. Longitudinal or valley Thalweg Profile (1)	Assignment
6	09.09.2024 – 14.09.2024	Linear Aspects of streams: a. Relationship between stream order and stream Number (1)	
7	16.09.2024 – 21.09.2024	b. Relationship between stream order and Average stream length (1) c. Bifurcation ratio (1)	
8	23.09.2024 – 28.09.2024	Areal Aspects of streams: a. Drainage Frequency (1)	
9	30.09.2024 – 05.10.2024	b. Drainage Density (1)	
10	07.10.2024 – 12.10.2024	Relief & Slope Aspect a) Area Height Curve (1) b) Altimetric frequency curve (1)	
11	14.10.2024 – 19.10.2024	c) Hypsographic Curve (1) d) Hypsometric Integral Curve	

12	21.10.2024 – 26.10.2024	e) Clinographic or clinometric curve (1)	
13	04.11.2024 – 09.11.2024	Slope Analysis a) Wentworth's Method of Average Slope	Test
14	11.11.2024 – 16.11.2024	b) G. H. Smith's Method of Relative Relief (1)	
15	18.11.2024 – 23.11.2024	Preparation of Viva-Voice	
16	25.11.2024 – 30.11.2024	Preparation of Viva-Voice	

Recommended Books/ E resources/ LMS

- 1. Misra, R.P. and Ramesh, A. (1999) Fundamentals of Cartography. Concept Publishing Company, New Delhi**
- 2. Monkhouse, F.J. and Wilkinson, H. R. (1980) Maps and Diagrams. B. I. Publications, New Delhi.**
- 3. Singh, R. L. (1986) Elements of Practical Geography. Kalyani Publishers, New Delhi.**



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