

**B.A. / B.Sc. (Geography) Degree**  
(Basic / Honours with Research)  
**Scheme & Syllabus - NEP-2020 & CBCS**

Semester	Course Code	Course Title	Teaching Hours	Hours / Week	Examination Pattern Max. & Min. Marks / Paper			Duration of the Exam (hours)	Total Marks / Paper	Credits
				Theory / Practical	Theory / Practical			Theory / Practical		Theory / Practical
					Max.	Min.	IA			
Third	DSC.T-3	Fundamentals of Human Geography	56	4	60	21	40	2	100	4
	DSC.P-3	Techniques in Human Geography	56	4	25	9	25	2	50	2
	OE-3.1	Geography of India	42	3	60	21	40	2	100	3
	OE-3.2	Geography of Tourism								
	L1-3.1	English	42	3	60	21	40	2	100	3
	L2-3.2	Kannada / Hindi / ....	42	3	60	21	40	2	100	3
	SEC.S-2	Artificial Intelligency	28	2	30	9	20	2	50	2
	SEC.V-5		14	1			25	1	25	1
	SEC.V-6		14	1			25	1	25	1

Semester	Course Code	Course Title	Teaching Hours	Hours / Week	Examination Pattern Max. & Min. Marks / Paper			Duration of the Exam (hours)	Total Marks / Paper	Credits
				Theory / Practical	Theory / Practical			Theory / Practical		Theory / Practical
					Max.	Min.	IA			
Fourth	DSC.T-4	Regional Geography of India	56	4	60	21	40	2	100	4
	DSC.P-4	Representation of Geographical Features of India	56	4	25	9	25	2	50	2
	OE-4.1	Geography of Karnataka	42	3	60	21	40	2	100	3
	OE-4.2	Regional Planning and Development								
	L1-4.1	English	42	3	60	21	40	2	100	3
	L2-4.2	Kannada / Hindi / .....	42	3	60	21	40	2	100	3
	AECC-2	Constitution of India	28	2	30	9	20	2	50	2
	SEC.V-7		14	1			25	1	25	1
	SEC.V-8		14	1			25	1	25	1

<b>B.A. / B.Sc. Semester – III</b>		
<b>Title of the Course: DSC.T- 3 Fundamentals of Human Geography</b>		
<b>Number of Theory Credits</b>	<b>Number of theory hours</b>	
<b>4</b>	<b>56</b>	
<b>Course Learning Outcomes:</b>		
After the completion of this course, students should be able to		
<ol style="list-style-type: none"> <li>1. Students learn how human and physical components of the world interact.</li> <li>2. Students will be familiarized with economic processes such as globalization, trade and their impacts on economic, cultural and social activities.</li> <li>3. The student will describe what geography and human geography are.</li> <li>4. Understand population dynamics and migration.</li> </ol>		
<b>Course Objectives:</b>		
This course aims to		
<ol style="list-style-type: none"> <li>1. Understand the basic concepts of human geography</li> <li>2. Study population attributes and dynamic nature of it.</li> <li>3. Introduce economic, cultural, and trade activities and their impact on the regional development.</li> </ol>		
	<b>Content of Theory Course</b>	<b>56 h</b>
<b>Unit – 1</b>	<b>Introduction to Human Geography:</b> <b>1.1</b> Nature, scope and growth of human geography, Branches in human geography. <b>1.2</b> Themes in Geography, man-environment debate in human Geography. <b>1.3</b> Approaches to man-environment relationship: Environmental Determinism and Possibilism, Neo-determinism (stop and go determinism), Approaches to study human geography – Descriptive approach, Regional approach, Areal Differentiation approach and spatial organization approach. Quantitative revolution and locational analysis. <b>1.4</b> Welfare or Humanistic approach, Radical approach, Behavioral approach. Regional Synthesis.	02 06 06 02
<b>Unit – 2</b>	<b>Cultural Patterns and Process:</b> <b>2.1</b> Concept of Culture, Material and Non-material culture Cultural Regions, cultural Traits and Complexes, cultural Hearths. Major cultural realms of the world. <b>2.2</b> Race: Characteristics and classification. Broad racial groups of the world and their distribution. Linguistic and ethnic diversity. <b>2.3</b> Major Religions and their Distribution: Hinduism, Christianity, Islam and Buddhism. <b>2.4 Assignment:</b> Students will have to select nearby area and study religions and their characteristics and submit the report.	04 04 04 02
<b>Unit – 3</b>	<b>Human Economic Activities:</b> <b>3.1</b> Primary Economic Activities. Agriculture: Primitive Subsistence, Intensive subsistence, Plantation Agriculture, Extensive Commercial grain cultivation, Mixed Farming, Dairy Farming. Forestry, fishing and mining <b>3.2</b> Secondary Activities: Manufacturing – Cotton Textile and Iron & Steel. Concept of Manufacturing Region. Industrial Regions of the world. New Industrial Policy. <b>3.3</b> Tertiary Activities: Trade and commerce, Retail Trading services, wholesale trading. Trade balance and trade policy. <b>3.4</b> Major tribes, tribal areas and their problems.	04 04 02 04
	<b>Population, Transport &amp; Communication &amp; Settlements:</b> <b>4.1</b> Population: Resource Relationships and regional resource development.	<b>02</b>

<b>Unit –4</b>	<b>4.2</b> Transport and communications: Factors, Types and Distribution of Roads, Railway, airway and waterways. Services: Formal and Informal sector. Information technology.	<b>04</b>
	<b>4.3</b> Urban Settlements: Origin and evolution, hierarchy, trends and patterns of urban settlements. Urban morphology. Concept of Primate City and rank size rule. Functional classification of towns, Rural-urban fringe. Problems and remedies of urbanization. Central Place theory	<b>04</b>
	<b>4.4</b> Rural Settlements – types, patterns and factors influencing on distribution.	<b>02</b>
	<b>4.5 Field Study:</b> Students have to study human resource development in local area and prepare a report.	<b>02</b>

**References:**

1. Dickens and Pitts (1963) Introduction to Human Geography,
2. Harm D. Blij (1992) Human and Economic Geography, Macmillan Publishing Company, New York
3. Hussain M (2003) Human Geography, Rawat Publications, Jaipur
4. Nellson, Gabler Vining (1995) Human Geography, People, Cultures and Landscapes
5. Ranganath (2002) Principles of Human Geography ( Kannada Version) Vidyanidhi, Gadag
6. Rubenstein J.M (2016). An Introduction to Human Geography, Macmillan Publishing Company, New York
7. S.D. Maurya (2012), Human Geography, Pravalika Publications, Allahabad
8. L.R.Singh(2005), Fundamentals of Human Geography, Sharda Pustak Bhawan, Allahabad

**Websites:**

1. <https://www.indiaculture.nic.in/>
2. <https://dea.gov.in/>
3. <https://dpiit.gov.in/>
4. <https://www.mines.gov.in/>
5. <https://censusindia.gov.in/census.website/>

<b>B.A. / B.Sc. Semester – III</b>		
<b>Title of the Course: DSC.P- 3 Techniques in Human Geography</b>		
<b>Number of Practical Credits</b>	<b>Number of Practical hours</b>	
<b>2</b>	<b>56</b>	
<b>Course learning Outcomes:</b>		
<p>After the completion of this course, students should be able to</p> <ol style="list-style-type: none"> <li>1. Students will learn how human, physical, and environmental components of the world interact.</li> <li>2. Students will be familiarized with economic processes such as globalization, trade and their impacts on economic, cultural and social activities.</li> <li>3. The student will describe what geography and human geography are.</li> <li>4. Understand population dynamics and migration.</li> </ol>		
<b>Course Objectives:</b>		
<p>This course aims to</p> <ol style="list-style-type: none"> <li>1. Understand the basics concepts of human geography</li> <li>2. Study population attributes and dynamic nature of it.</li> <li>3. Introduce economic, cultural, and trade activities and their impact on the development to the region.</li> </ol>		
	<b>Content of Practical Course</b>	<b>56 h</b>
<b>Exercise 1</b>	<b>Maps:</b> Definition, Elements of maps (scale, direction, map projection, conventional signs and symbols, legend), Types of maps, Uses of maps	<b>7</b>
<b>Exercise 2</b>	<b>Map Scales:</b> Definition and Types- Verbal Scale (VS), Representative Fraction (RF), Graphical Scale.	<b>7</b>
<b>Exercise 3</b>	Conversion of scale - VS into RF and RF into VS (Minimum 2 examples each), Exercise on measuring distance on map and converting map distance into ground distance.	<b>7</b>
<b>Exercise 4</b>	<b>Field-based Activity:</b> Students are to be prepared a report by reading of maps in the field and collection of data and its representation.	<b>7</b>
<b>Exercise 5</b>	<b>Meaning and purpose of latitudes and longitude.</b> <b>Map Projections:</b> Classification of map projections and their properties.	<b>7</b>
<b>Exercise 6</b>	Construction of Cylindrical Projections - Cylindrical Equal Area Projection.	<b>7</b>
<b>Exercise 7</b>	Construction of the Conical Projections - Conical Projection with one and two standard parallel.	<b>7</b>
<b>Exercise 8</b>	Construction of the Zenithal projections - Zenithal Polar Gnomonic Projection. <b>Introduction to UTM Projection.</b>	<b>7</b>

## References:

1. Dent B.D., 1999. Cartography: Thematic Map Design, (Vol. 1), McGraw Hill
2. Gupta K.K and Tyagi V.C., 1992. Working with Maps, Survey of India, DST, New Delhi.
3. Mishra R.P. and Ramesh A., 1989. Fundamentals of Cartography, Concept Publishing.
4. Monkhouse, F.J. and Wilkinson, H.R., 1971. Maps and Diagrams. Methuen and Co. Ltd., London. K.
5. Singh, R.L., 2005. Elements of Practical Geography. Kalyani Publishers, New Delhi. India.
6. Ramamurthy, K., 1982. Map Interpretation, Rex Printers, Madras.
7. Robinson A. ,1953. Elements of Cartography, John Wiley.
8. Sharma J. P., 2010. Prayogic Bhugol, Rastogi Publishers.
9. Singh R.L. and Singh R.P.B., 1999. Elements of Practical Geography, Kalyani Publishers.
10. Singh R.L., 1998. Prayogic Bhugol Rooprekha, Kalyani Publication.
11. Singh, G., 2005. Map work and practical geography. Vikas Publishing House Pvt. Ltd., New Delhi
12. Singh, L.R. and Singh, R., 1973. Map work and practical geography, Central Book Allahabad
13. Siddhartha, K., 2006. Geography through maps, Kishalaya Publications Pvt. Ltd, Delhi
14. Singh, R.L., and Dutt, P.K., 1968. Elements of practical geography, Students' Friends, Allahabad
15. Steers, J.A., 1970. An Introduction to Study of Map Projections. University of London Press Ltd., London.

<b>B.A. / B.Sc Semester – III</b>		
<b>Title of the Course: OE 3.1 Geography of India</b>		
<b>Number of theory Credits</b>	<b>Number of theory hours</b>	
<b>3</b>	<b>42</b>	
<b>Course Outcomes:</b>		
After the completion of this course, students should be able to		
<ol style="list-style-type: none"> <li>1. Understanding holistically about the geography of India</li> <li>2. Interpret and apply the concepts on resource distribution of India and related economic activities</li> <li>3. Demonstrate the economic development through the connectivity of transport and communication</li> </ol>		
<b>Course Objectives:</b>		
The course aims to		
<ol style="list-style-type: none"> <li>1. Understand the basics geographical setting of India</li> <li>2. Study physiographic divisions with drainage, soil and vegetation of India.</li> <li>3. Gets exact information regarding mechanism of monsoon and its impact.</li> </ol>		
	<b>Content of Theory Course</b>	<b>42 h</b>
<b>Unit – 1</b>	<b>Physical Setting :</b> 1.1 Location and Extension of India, 1.2 Physiographic divisions, 1.3 Climate, Drainage system, 1.4 Soil Types and its distribution, 1.5 Natural Vegetation. 1.6 Water Disputes: River Brahmaputra and Indus. 1.7 Geopolitical Issues: Indo-china, Indo-Pakistan.	<b>01</b> <b>02</b> <b>02</b> <b>01</b> <b>01</b> <b>02</b> <b>01</b>
<b>Unit – 2</b>	<b>Irrigation and Agriculture:</b> 2.1 Need for irrigation, types and distribution. Multipurpose river valley projects Significance of Agriculture, Types of farming. 2.3 Agro Climatic Regions of India 2.4 Agricultural Crops: Rice, Wheat, Sugarcane, cotton, Tea and Coffee. 2.4 Green Revolution, White Revolution, Blue revolution, Blue Revolution. 2.5 <b>Assignment:</b> Selecting a mining / quarrying / industrial region students have to study the locational factors and prepare a report.	<b>02</b> <b>02</b> <b>01</b> <b>01</b> <b>02</b> <b>02</b>
<b>Unit – 3</b>	<b>Minerals, Energy Resources and Industries:</b> 3.1 Significance and locational factors. 3.2 Distribution of Iron ore, Manganese, Bauxite, Coal, Petrol. 3.3 Distribution and production of industries: Cotton Textile, Jute, Iron and Steel, Aluminum and Paper. 3.4 Special Economic Zones	<b>02</b> <b>01</b> <b>04</b> <b>01</b>
<b>Unit – 4</b>	<b>Transportation and Communication in Regional Development:</b> 4.1 Roadways, Railway, airways waterways. 4.2 Ports and National Water Ways 4.3 Indian <i>Space</i> Programme. 4.4 Population: Growth, distribution, Structure and Density of Population. 4.5 <b>Field Study:</b> Selecting a region students have to carry out transportation system and prepare a report.	<b>02</b> <b>02</b> <b>02</b> <b>02</b> <b>02</b>

## References

1. Khullar DR. (2009): India: A Comprehensive Geography, kalyani Publishes, New Delhi, Hyderabad, Kolkata.
2. AlkaGautam (2009) Geography of India, Sharada pustak bhawan, University Road, Allahabad – UP.
3. Sharma TC & Coutinho O (2005) : Economic and Commercial geography of India, Vikas Publishing House Ltd., New Delhi-14
4. Tiwari RC. (2008) Geography of India, Prayagpustak Bhavan, 20-A, University Road, Allahabad- UP
5. Pritivish Nag & Smita Sengupta (1992) Geography of India, Concept Publishing Company, New Delhi.
6. Ranganath (2007) Geography of India, Vidhyanidhi Prakashan, Station Road, Gadag-01.
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8. Majid Husain (2008): Geography of India, Tata Mc. Graw hill publishing co. ltd. N. Delhi.
9. Singh R.L. (1971); India A Regional Geography, National Geographical Society of India, Varanasi, UP.
10. Jadish Sing (2003): India: A comprehensive systematic geography, Gyanodaya Prakashan Gorakhpur- UP.
11. Kalpana Rajaram (2012), Geography of India, Spectrum Books Pvt. Ltd
12. Y.I. Singh (2021), Geography of India, Global Net Publication

## Websites:

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2. <https://agricoop.nic.in/en>
3. <https://www.resourcedata.org/dataset/rgi-ministry-of-minerals-energy-and-water-resources>
4. <https://dpiit.gov.in/>
5. <http://rfrfoundation.org/nadi-ko-jano/>
6. <https://jalshakti-ddws.gov.in/>

<b>B.A. / B.Sc. Semester – III</b>		
<b>Title of the Course: OE 3.2 Geography of Tourism</b>		
<b>Number of theory Credits</b>	<b>Number of theory hours</b>	
<b>3</b>	<b>42</b>	
<b>Course Learning Outcomes:</b>		
<p>After the completion of this course, students should be able to</p> <ol style="list-style-type: none"> <li>To elucidate the basic concepts, and assess different forms of tourism</li> <li>To identify role of geography along with economic, social, and environmental importance of tourism industry</li> <li>To provide skills in terms of tourism management, environmental preservation, and conservation</li> </ol>		
<b>Course Objectives:</b>		
<p>Upon completing this course, students will be able to:</p> <ol style="list-style-type: none"> <li>Contextualize tourism within broader physical, cultural, environmental, and economic dimensions of society,</li> <li>Critique tourism practices for their implications locally and globally.</li> <li>Interpret and evaluate tourism as a phenomenon and as a business system</li> <li>Plan, lead, organize and control resources for effective and efficient tourism</li> </ol>		
	<b>Content of Theory Course</b>	<b>42 h</b>
<b>Unit – 1</b>	<p><b>Introduction:</b></p> <p>1.1 Scope and Content of Tourism Geography <span style="float: right;"><b>02</b></span>  1.2 Economic and Social significance of tourism <span style="float: right;"><b>02</b></span>  1.3 Tourism Components: Accessibility, Accommodation, Attraction – Motivation – Seasonality <span style="float: right;"><b>02</b></span>  1.4 Impacts of Tourism: Socio Cultural, Economic, and Environmental impacts <span style="float: right;"><b>02</b></span>  1.5 Effects on employment - Development of infrastructure <span style="float: right;"><b>01</b></span>  1.6 Tourism as a foreign exchange earner <span style="float: right;"><b>01</b></span></p>	
<b>Unit – 2</b>	<p><b>Types of Tourism:</b></p> <p>2.1 Types of Tourism: Religious, Cultural, Historical, Recreational, Coastal, Ecological and Medical tourism <span style="float: right;"><b>02</b></span>  2.2 Forms of Tourism: National tourism (Domestic) <span style="float: right;"><b>02</b></span>  2.3 International Tourism (Inbound and Outbound Tourism) <span style="float: right;"><b>02</b></span>  2.4 New Forms of Tourism: Adventure, Green Tourism, Eco tourism, Health, MICE Tourism, Soft Tourism, Sports Tourism and Rural tourism. <span style="float: right;"><b>02</b></span>  2.5 <b>Assignment:</b> Students have to study eco-tourism and submit a report. <span style="float: right;"><b>02</b></span></p>	
<b>Unit – 3</b>	<p><b>Tourism Management &amp; Planning:</b></p> <p>3.1 Tourism Management – Objective, Strategies and Types of Tourism Management. <span style="float: right;"><b>02</b></span>  3.2 Tourism Planning Process and Approaches <span style="float: right;"><b>02</b></span>  3.3 Types of Tourism Planning: Sectoral, Spatial, Integrated, Complex, Centralized and Decentralized <span style="float: right;"><b>02</b></span>  3.4 Tourism Demand: Determinants and Measurement - Cost benefit analysis - Multiplier effect <span style="float: right;"><b>02</b></span>  3.5 Role of IT and GIS in tourism management. <span style="float: right;"><b>02</b></span></p>	
<b>Unit – 4</b>	<p><b>Tourism development in India:</b></p> <p>4.1 Tourism development in India <span style="float: right;"><b>02</b></span>  4.2 Tourism development in Karnataka <span style="float: right;"><b>02</b></span>  4.3 Tourism and Environmental management - Sustainable Tourism Management, Wildlife Management, Environmental Preservation and Conservation, Community <span style="float: right;"><b>04</b></span></p>	



Involvement and participation	
4.4 Tourism policies and programme	02
4.5 <b>Field Study:</b> Selecting a region / district students have to study development of tourism and prepare a report.	02

## References

1. Swain and Mishra (2011), "Principles of Tourism", Oxford University Press, New Delhi
2. A.K.Bhatia,(2012) "Tourism Development: Principles and Strategies, Sterling Publishers, New Delhi
3. Velvet Nelson (2013) – An Introduction to the Geography of Tourism, Rowman & Littlefield Publishers
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## Websites:

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<b>B.A. / B.Sc. Semester – IV</b>		
<b>Title of the Course: DSC.T- 4 Regional Geography of India</b>		
<b>Number of Theory Credits</b>	<b>Number of Theory hours</b>	
<b>4</b>	<b>56</b>	
<b>Course Learning Outcomes:</b>		
<p>After the completion of this course, students should be able to</p> <ol style="list-style-type: none"> <li>1. Understanding holistically about the geography of India</li> <li>2. Interpret and apply the concepts on resource distribution of India and related economic activities</li> <li>3. Demonstrate the economic development through the connectivity of transport and communication</li> </ol>		
<b>Course Objectives:</b>		
<p>The course aims to</p> <ol style="list-style-type: none"> <li>1. Understand the basics geographical setting of India</li> <li>2. Study physiographic divisions with drainage, soil and vegetation of India.</li> <li>3. Gets exact information regarding mechanism of monsoon and its impact.</li> </ol>		
	<b>Content of Theory Course</b>	<b>56 h</b>
<b>Unit – 1</b>	<p><b>Physical Setting:</b></p> <p>1.1 Location, size and extent. Major physiographical regions (northern mountains, northern great plains, peninsular plateau and coastal plains and islands) and their characteristics;</p> <p>1.2 Climate: Seasonal weather characteristics, climatic zones. Mechanism and characteristics of Indian monsoons;</p> <p>1.3 Tropical cyclones and western disturbances;</p> <p>1.4 Floods and droughts.</p> <p>1.5 Drainage system.</p> <p>1.6 Soil: types, erosion and conservation.</p> <p>1.7 Vegetation: Types, distribution, afforestation, social forestry programs, national parks, wildlife sanctuaries, and biosphere reserves.</p>	<p><b>04</b></p> <p><b>04</b></p> <p><b>02</b></p> <p><b>01</b></p> <p><b>01</b></p> <p><b>02</b></p>
<b>Unit – 2</b>	<p><b>Water and Agricultural Resources:</b></p> <p>2.1 Water resources of India, surface and groundwater, water demand and utilization.</p> <p>2.2 Irrigation: Sources, types and intensity. Issues and challenges: water resources scarcity, water conservation and management</p> <p>2.3 watershed management, rainwater harvesting, recycle and reuse of water. Interlinking of rivers,</p> <p>2.4 National water policies, national water mission, jalashakti Abhiyaan. Command area development and water management. Central Water Commission and Water Tribunal and their role.</p> <p><b>2.5 Agriculture:</b> Landuse and cropping pattern – meaning and concepts, landuse and cropping Patten in India, agro-climatic regions, green revolution – causes and effects, hunger index and malnutrition; food security and right to food to achieve Zero hunger and Good Health and Wellbeing.</p> <p><b>2.6 Assignment:</b> Selecting a region students have to study the locational factors nearby industry and prepare a report.</p>	<p><b>02</b></p> <p><b>03</b></p> <p><b>02</b></p> <p><b>03</b></p> <p><b>04</b></p> <p><b>02</b></p>
<b>Unit – 3</b>	<p><b>Industries, transportation and communication:</b></p> <p>3.1 Locational factors of industries, major industrial regions and their characteristics,</p> <p>3.2 Classification of Industries: Agro-based, mineral-based, forest-based and animal-based industries.</p> <p>3.3 Special Economic Zones: Industrial / economic corridor.</p> <p>3.4 Transport &amp; Communication: Significance, growth and development – Road ways,</p>	<p><b>02</b></p> <p><b>02</b></p> <p><b>02</b></p> <p><b>04</b></p>

	<p>railway, waterway, airway and pipeline networks and their complementary and competition.</p> <p>3.5 Communication: Means of communication their significance.</p>	02
Unit –4	<p><b>Human Resource:</b></p> <p>4.1 Growth, distribution and density of population.</p> <p>4.2 Composition of population: Age, sex, rural-urban population composition.</p> <p>4.3 Migration: meaning, factors, types, causes and consequences.</p> <p>4.4 Human Development in India: Measures, levels of development based on HDI, Human Gender Development Index (GDI0</p> <p>4.5 <b>Field Study:</b> Selecting a region / district students have to examine the levels of Human Development using HDI and prepare a report.</p>	02 04 02 04 02
<p><b>References</b></p> <ol style="list-style-type: none"> <li>1. Khullar DR. (2009): India: A Comprehensive Geography, kalyani Publishes, New Delhi, Hyderabad, Kolkata.</li> <li>2. Alka Gautam (2009) Geography of India, Sharada pustak bhawan, University Road, Allahabad – UP.</li> <li>3. Sharma TC &amp; Coutinho O (2005) : Economic and Commercial geography of India, Vikas Publishing House Ltd., New Delhi-14</li> <li>4. Tiwari RC. (2008) Geography of India, Prayag Pustak Bhavan, 20-A, University Road, Allahabad- UP</li> <li>5. Pritivish Nag &amp; Smita Sengupta (1992) Geography of India, Concept Publishing Company, New Delhi.</li> <li>6. Ranganath (2007) Geography of India, Vidhyanidhi Prakashan, Station Road, Gadag-01.</li> <li>7. PhaniDeka &amp; Abani Bhagabati (1992) Geography: Economic and Regional, Wiley Eastern Limited, Ansari Raod, Daryaganj, N. Delhi-01.</li> <li>8. Majid Husain (2008): Geography of India, Tata Mc. Graw hill publishing co. ltd. N. Delhi.</li> <li>9. Singh R.L. (1971); India A Regional Geography, National Geographical Society of India, Varanasi, UP.</li> <li>10. Jadish Sing (2003): India: A comprehensive systematic geography, Gyanodaya Prakashan Gorakhpur- UP.</li> <li>11. Deshpande C. D., (1992): India: A Regional Interpretation, ICSSR, New Delhi.</li> <li>12. Johnson, B. L. C., ed. (2001). Geographical Dictionary of India. Vision Books, New Delhi.</li> <li>13. Mandal R. B. (ed.), (1990): Patterns of Regional Geography – An International Perspective. Vol. 3 – Indian Perspective.</li> <li>14. Sdyasuk Galina and P Sengupta (1967): Economic Regionalisation of India, Census of India</li> <li>15. Singh R. L., (1971): India: A Regional Geography, National Geographical Society of India.</li> <li>16. Singh, Jagdish (2003): India - A Comprehensive &amp; Systematic Geography, GyanodayaPrakashan, Gorakhpur.</li> <li>17. Singh, RB, Schickhoff, Udo, Mal, Suraj (Eds.) (2016) Climate Change, Glacier Response, and Vegetation Dynamics in the Himalaya, Springer, Japan.</li> <li>18. Singh, R.B. 2014, Urban Development Challenges, Risk &amp; Resilience in Asian Mega Cities, Springer, Tokyo.</li> <li>19. Spate O. H. K. and Learmonth A. T. A., (1967): India and Pakistan: A General and Regional Geography, Methuen.</li> <li>20. Alyssa Ayres (2018.), Our Time Has Come, How India is Making Its Place in the World,</li> <li>21. Panna Lal(2012), India- A Regional Geography, Anmol Publications</li> </ol> <p><b>Websites:</b></p> <ol style="list-style-type: none"> <li>1. <a href="http://www.mapsofindia.com/geography/">http://www.mapsofindia.com/geography/</a></li> <li>2. <a href="https://mausam.imd.gov.in/">https://mausam.imd.gov.in/</a></li> <li>3. <a href="https://tourism.gov.in/">https://tourism.gov.in/</a></li> <li>4. <a href="https://www.resourcedata.org/dataset/rgi-ministry-of-minerals-energy-and-water-resources">https://www.resourcedata.org/dataset/rgi-ministry-of-minerals-energy-and-water-resources</a></li> <li>5. <a href="https://dpiit.gov.in/">https://dpiit.gov.in/</a></li> <li>6. <a href="https://agricoop.nic.in/en">https://agricoop.nic.in/en</a></li> <li>7. <a href="https://www.fao.org/soils-portal/en/">https://www.fao.org/soils-portal/en/</a></li> </ol>		

<b>B.A. / B.Sc. Semester – IV</b>		
<b>Title of the Course: DSC.P- 4 Representation of Geographical Features of India</b>		
<b>Number of Practical Credits</b>	<b>Number of Practical hours</b>	
<b>2</b>	<b>56</b>	
<b>Course Learning Outcomes:</b>		
<p>After the completion of this course, students should be able to</p> <ol style="list-style-type: none"> <li>1. Understanding holistically about the geography of India</li> <li>2. Interpret and apply the concepts on resource distribution of India and related economic activities</li> <li>3. Demonstrate the economic development through the connectivity of transport and communication</li> </ol>		
<b>Course Objectives:</b>		
<p>The course aims to</p> <ol style="list-style-type: none"> <li>1. Understand the basics geographical setting of India</li> <li>2. Study physiographic divisions with drainage, soil and vegetation of India.</li> <li>3. Gets exact information regarding mechanism of monsoon and its impact.</li> </ol>		
	<b>Content of Practical Course</b>	<b>56 h</b>
<b>Exercise 1</b>	Prepare various landforms using toposheets and interpret.	7
<b>Exercise 2</b>	Construct soil fertility (NPK) and distribution (India / Karnataka / District) map by using choropleth method and interpret.	7
<b>Exercise 3</b>	Construct rainfall distribution map of India / Karnataka / District by using isopleth method and interpret.	7
<b>Exercise 4</b>	<b>Field Activity:</b> Candidates are to be taken for field work to nearest local place of natural / cultural area and ask them to prepare report how natural / cultural landscape change over the time and submit a report.	7
<b>Exercise 5</b>	Mapping temperature distribution in India / Karnataka / District by using isopleth method and interpret.	7
<b>Exercise 6</b>	Construct a map regarding impact of industries in India by using buffer analysis digitally / manually and interpret.	7
<b>Exercise 7</b>	Prepare flow-diagrams relating to air and railway transportation of India / Karnataka / District and interpret.	7
<b>Exercise 8</b>	Construct special need and tourism interest map of India / Karnataka / District and interpret.	7
<b>References</b>		
<ol style="list-style-type: none"> <li>1. Khullar D.R. (2009): India: A Comprehensive Geography, Kalyani Publishes, New Delhi, Hyderabad, Kolkata.</li> <li>2. Alka Gautam (2009) Geography of India, Sharada Pustak Bhawan, University Road, Allahabad – UP.</li> </ol>		

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5. Pritivish Nag & Smita Sengupta (1992) Geography of India, Concept Publishing Company, New Delhi.
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**websites:**

<http://www.mapsofindia.com/geography/>

<b>B.A. / B.Sc. Semester – IV</b>		
<b>Title of the Course: OE- 4.1 Geography of Karnataka</b>		
<b>Number of Theory Credits</b>	<b>Number of Theory hours</b>	
<b>3</b>	<b>42</b>	
<b>Course Learning Outcomes:</b>		
<p>After the completion of this course, students should be able to</p> <ol style="list-style-type: none"> <li>1. Understand the site and situation of Karnataka</li> <li>2. Intellectual connect to the resources and economic activities of Karnataka</li> <li>3. Assess demographic composition of Karnataka state</li> </ol>		
<b>Course Objectives:</b>		
<p>The course aims to</p> <ol style="list-style-type: none"> <li>1. To introduce geographical setting</li> <li>2. To make students understand various physical and cultural features of Karnataka</li> <li>3. To make students comprehend natural resources and their optimal use in the state</li> </ol>		
	<b>Content of Theory Course</b>	<b>42 h</b>
<b>Unit – 1</b>	<p><b>Introduction::</b></p> <p>1.1 Geographical Location, size and Administrative divisions. <span style="float: right;"><b>02</b></span></p> <p>1.2 Coastal Regions, Western Ghats, Malanadu Regions and Maidana Regions of Karnataka. <span style="float: right;"><b>02</b></span></p> <p>1.3 <b>Weather and Climate:</b> Seasons, Distribution of Rainfall and Temperature, Climatic regions, Drought prone areas in Karnataka. <span style="float: right;"><b>02</b></span></p> <p>1.4 <b>Drainage Systems:</b> East flowing rivers and west flowing rivers. <span style="float: right;"><b>02</b></span></p>	<b>02</b>
<b>Unit – 2</b>	<p><b>Soils, Natural Vegetation and Irrigation:</b></p> <p>2.1 Introduction, soil types and characteristics. <span style="float: right;"><b>02</b></span></p> <p>2.2 <b>Natural Vegetation:</b> Types of vegetation, Distribution of forest in Karnataka, Protection and Conservations. Reserve Forest and Protected Forest in Karnataka, National Parks and Bird Sanctuaries in Karnataka. <span style="float: right;"><b>03</b></span></p> <p>2.3 <b>Irrigation:</b> Importance, Distribution of water resources, Irrigations – sources of irrigation, multipurpose river valley projects. <span style="float: right;"><b>02</b></span></p> <p>2.4 River Disputes in Karnataka and River Linkages. <span style="float: right;"><b>01</b></span></p> <p>2.5 <b>Assignment:</b> Students need to visit local fields and get to know how soil conservation plans are prepared and submit report. <span style="float: right;"><b>02</b></span></p>	<b>02</b>
<b>Unit – 3</b>	<p><b>Agriculture:</b></p> <p>3.1 Introduction, Agriculture regions of Karnataka. <span style="float: right;"><b>02</b></span></p> <p>3.2 <b>Major Food Crops</b> – Paddy, Ragi, Maize, Wheat, Pulses. <span style="float: right;"><b>02</b></span></p> <p>3.3 <b>Commercial Corps</b> – Cotton, Sugarcane, Tobacco, Coffee, Species, Mulberry crop. Fishing and Nomadic Herding. <span style="float: right;"><b>03</b></span></p> <p>3.4 <b>Energy Resources:</b> Types, Importance and their distributions. <span style="float: right;"><b>02</b></span></p> <p>3.5 Agro-climatic regions <span style="float: right;"><b>01</b></span></p>	<b>02</b>
<b>Unit –4</b>	<p><b>Minerals:</b></p> <p>4.1 Gold, Iron, Manganese, Lime Stone. <span style="float: right;"><b>02</b></span></p> <p>4.2 <b>Industries:</b> Sugar Industries, Silk Industries, Iron and Steel Industries, Cotton Industries, IT and BT Industries. <span style="float: right;"><b>02</b></span></p>	<b>02</b>

	<p>4.3 Industrial Policies of Karnataka.</p> <p>4.4 <b>Transportation:</b> Types of Transportation, Distribution of Transportation.</p> <p>4.5 Population: Distribution of Population, Sex ratio, Literacy. Tourism: Potential zones, ecotourism and tourism development.</p> <p>4.6 <b>Field Study:</b> Students need to observe and prepare report regarding local industries and their role development of the region.</p>	<p><b>02</b></p> <p><b>02</b></p> <p><b>02</b></p> <p><b>02</b></p>
<p><b>References</b></p> <ol style="list-style-type: none"> <li>1. Ranganath (2015), Geography of Karnataka, Publisher: Mysore Book House</li> <li>2. S.S.Nanjannavar (2016), Geography of Karnataka, Prabhu publications</li> <li>3. R. N. Tikka (2002), Physical Geography</li> <li>4. Misra R.P(1969) Geography of Mysore State</li> <li>5. Sarmah Dipak (2019), Forest of Karnataka-A Paronomic View, Notion Press</li> <li>6. Director, Census Reports Published by Govt. of Karnataka</li> <li>7. Karnataka State Gazetteer Volume- I &amp; II</li> </ol> <p><b>Websites:</b></p> <ol style="list-style-type: none"> <li>1. <a href="https://ksrsac.karnataka.gov.in/">https://ksrsac.karnataka.gov.in/</a></li> <li>2. <a href="https://ksdma.karnataka.gov.in/english">https://ksdma.karnataka.gov.in/english</a></li> <li>3. <a href="https://raitamitra.karnataka.gov.in/english">https://raitamitra.karnataka.gov.in/english</a></li> <li>4. <a href="https://www.karnatakaturism.org/tourism-department/">https://www.karnatakaturism.org/tourism-department/</a></li> </ol>		

<b>B.A. / B.Sc. Semester – IV</b>		
<b>Title of the Course: OE- 4.2 Regional Planning and Development</b>		
<b>Number of Theory Credits</b>	<b>Number of Theory hours</b>	
<b>3</b>	<b>42</b>	
<b>Course Outcomes:</b>		
After the completion of this course, students should be able to		
<ol style="list-style-type: none"> <li>1. Basic understanding of regional planning and development</li> <li>2. Analyse the distribution natural resources and human population</li> <li>3. Identifying imbalance and backward regions and planning for the sustainable development</li> </ol>		
<b>Course Objectives:</b>		
The course aims to		
<ol style="list-style-type: none"> <li>1. To make students aware of concept of regional planning</li> <li>2. To realize students how regional planning are prepared and executed.</li> <li>3. To know how regional balance and sustainable development can be achieved in the region.</li> </ol>		
	<b>Content of Theory Course</b>	<b>42 h</b>
<b>Unit – 1</b>	<b>Regional concept in Geography:</b> 1.1 Types, hierarchy and characteristics of regions, 1.2 Delineation methods of regions 1.3 Formal, Functional and Nodal. 1.4 Geography and regional planning. 1.5 Concept and scope of Regional Planning. Regional Approaches. Principles, methods, techniques of regional planning, need for planning.	<b>02</b> <b>02</b> <b>02</b> <b>02</b> <b>02</b>
<b>Unit – 2</b>	<b>Conceptual and theoretical frame work of regional planning:</b> 2.1 Growth pole and growth foci. 2.2 Planning Processes: Sectoral, Multilevel, decentralized planning. 2.3 Integrated Area Development Planning (IADP). 2.4 Planning for tribal and hilly areas, drought prone areas, command areas and watershed. 2.5 Planning for metropolitan region: CDP, satellite towns, urban green belt. 2.6 <b>Assignment:</b> Students need to visit local government institution and get to know how local area plans are prepared and submit report.	<b>02</b> <b>02</b> <b>02</b> <b>02</b> <b>02</b> <b>02</b>
<b>Unit – 3</b>	<b>Regional Development:</b> 3.1 Concept of Development, Indicators of development. 3.2 Regional imbalance. Regional development strategies. Problems and issues in regional planning. Planning for sustainable development. 3.3 Regionalization of India: Based on natural, economic and administration (macro and meso levels only). 3.4 Regional policies in Indian five-year plans, experience of regional planning in India; Evolution, nature and scope of town planning with special reference to India; fundamentals of town and country planning.	<b>02</b> <b>02</b> <b>03</b> <b>03</b>
<b>Unit – 4</b>	<b>Theories of regional development:</b> 3.1 Central Place Theory, Diffusion theory (Hegerstand's). The role of locational theories in regional planning process. 3.2 An evaluation of regional disparities / imbalances – backward regions of India. Identification of backward areas, Planning backward area. Causes and consequences regional of disparities. Measures of disparities.	<b>02</b> <b>03</b>



	3.3 Harnessing the information through GIS, Remote Sensing, GPS for regional planning and development.	<b>03</b>
	3.4 <b>Field Study:</b> Students need to observe and prepare report regarding regional disparities and imbalance in their own surrounding.	<b>02</b>

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2. Mishra RP (1969) Regional Planning Concepts Techniques Policies and case studies, Prasaranga, The Mysore University, Mysore.
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