Four-Year Undergraduate Programme in Geography
Gauhati University

Eligibility Criteria of the programme, if any: For B.A. programme No Precondition, For B.Sc. programme 10 + 2 with Science

Semester	Course name	Major/Minor	Course code	Credits	Credit distribution of the course			Pre-requisites of the course (if any)	Internal marks	External Marks
					L	T	P			
I	Introduction to Physical Geography	**Major 1 & Minor1 (for Minor stream) & Minor 1 (*For Major in other subjects*)**	GGY 0100104	4	4	0	0	No	40	60
II	Introduction to Human Geography	**Major 2 & Minor2 (for Minor stream & Minor 2 (*For Major in other subjects*)**	GGY 0200104	4	4	0	0	No	40	60
III	Geography as a Spatial Science	**Major 3 & Minor3 (for Minor stream)**	GGY 0300104	4	4	0	0	No	40	60
III	Geography of Disaster	**Major 4 & Minor4(For Minor stream) & Minor 3 (*for Major in other subjects*)**	GGY0300204	4	4	0	0	No	40	60
IV	Geomorphology	**Major 5**	GGY 0400104	4	3	0	1	No	30	T-45 P-25
	Geography of India	**Major6 & Minor5 (for Minor stream) & Minor 4 (*For Major in other subjects*)**	GGY 0400204	4	3	0	1	No	30	T-45 P-25
	Cartographic Techniques	**(Major7)**	GGY 0400304	4	3	0	1	No	30	T-45 P-25
	Population and Settlement Geography	**Major 8 & Minor6 (for Minor stream)**	GGY0400404	4	3	0	1	No	30	T-45 P-25

V	Climatology, Biogeography and Oceanography	**Major 9 & Minor 7 (for Minor stream) & Minor 5 (*For Major in other subjects*)**	GGY 0500104	4	3	0	1	No	30	T-45 P-25
	Quantitative methods in Geography	**Major 10**	GGY 0500204	4	3	0	1	No	30	T-45 P-25
	*Economic and Resource Geography	**Major 11 & Minor 8(for Minor stream) *(Choose any one of these two papers)**	GGY 0500304	4	3	0	1	No	30	T-45 P-25
	*Social, Cultural and Political Geography		GGY 0500404	4	3	0	1	No	30	T-45 P-25
	Internship		GGY 0500504	4				No		100
VI	Geography of Environment and Development	**Major 12 & Minor 9 (for Minor stream)**	GGY 0600104	4	3	0	1	No	30	T-45 P-25
	Introduction to Remote Sensing and GIS	**Major13**	GGY 0600204	4	3	0	1	No	30	T-45 P-25
	Urban Geography	**Major14 & Minor 10 (for Minor stream)**	GGY 0600304	4	3	0	1	No	30	T-45 P-25
	*Surveying Techniques	**Major 15 & Minor 11(for Minor stream) & Minor 6 (*For Major in other subject)* *(Choose any one of these two papers)**	GGY 0600404	4	3	0	1	No	30	T-45 P-25
	*Geography of North East India		GGY 0600504	4	3	0	1	No	30	T-45 P-25

Four Year Undergraduate Programme

Subject: Geography
Semester: VI
Course Name: **Geography of Environment and Development**
Course Code: GGY0600104
Course Level: Higher
Part I: Theory (3 Credits, 45 classes of one-hour duration)
Part II: Practical (1 Credit, 15 classes of two-hours duration)
100 Marks (Theory =45 Marks, Practical=25 Marks, Internal Assessment = 30 Marks)

Course Objective:
This paper intends to introduce students to geography and environment interface. It seeks to develop insights among students on the relevance of environmental studies along with issues associated with its pollution, disaster and management of environmental problems

Course Outcome:

1. Understand the nature, scope, and significance of environmental geography, with emphasis on man-environment relationships and adaptation in different biomes.
2. Identify major environmental problems, comprehend their consequences, and understand the concepts of hazard, disaster, risk and vulnerability.
3. Evaluate the relationship between environment and development while understanding processes of sustainable development.
4. Comprehend and explain the concept, types and functioning of ecosystems; analyze energy flow and bio-geochemical cycles in ecosystems.
5. Evaluate critical themes in Environmental Geography, analyze biodiversity, conservation, water resource management and corporate ecological responsibility.

Part I
Unit I:
Environmental Geography: Nature, Scope and Significance; man-Environment Relationships, Historical progression, Adaptation in different Biomes

Unit II:
Major Environmental Problems: Pollution, Deforestation, Desertification, Global Warming, and Bio-Depletion; Hazard, Disaster, Risk and Vulnerability; Types of hazard/disaster (Natural and Man made).
Unit III:
Ecosystem: concept and types of ecosystem; functioning of ecosystem; Energy flow in ecosystem;bio-geochemical cycles; biosphere as an ecosystem.

Unit IV:
Environment and Development: ecology and equity, concept of environment and development; development processes: Nature and trend of development, sustainable development.

Unit V:
Thematic Issues in Environment Geography: The Population–Consumption–Technology Nexus Bio-diversity, Conservation, and Protected Areas, Water Resources and Fishing Livelihoods, Corporate ecological responsibility

Part II

Unit I: Practical Works (16 marks) (Two questions of 8 marks each)

1. Exploring satellite imageries and topographic sheets to observe bank line change of Brahmaputra River from any selected stretch in three different time periods and preparation of map therefrom. (1 exercise) (Satellite images can be downloaded from https://earthexplorer.usgs.gov/
2. Survey of India topographic sheets can be downloaded freely from https://soinakshe.uk.gov.in/mtr/
3. Mapping of major wetlands in a district and computation of shape and size (area) based distribution. (1 exercise)
4. Preparation of a map of a nearby wetland and identify the changes in dimension, water level and encroachment it faced during the last one decade. Present your data in tabular form along with the map (field-based). (1 exercise)
5. Preparation of a long-term precipitation time series curve for any selected station of N.E. Indiausing moving average method by downloading the annual rainfall data for any district/stationof Assam for at least 30 years (1 exercise)

Unit II: Practical Note-Book and Viva-voce (9 Marks)

1. Evaluation of Practical Note-Book (5 marks)
2. Viva-voce (4 marks)

Reading List

1. Chandna R. C., 2002: Environmental Geography, Kalyani, Ludhiana.
2. Cunninghum W. P. and Cunninghum M. A., 2004: Principals of Environmental Science: Inquiry and Applications, Tata Macgraw Hill, New Delhi.
3. Goudie A., 2001: The Nature of the Environment, Blackwell, Oxford.
4. Singh, R.B. (Eds.) (2009) Biogeography and Biodiversity. Rawat Publication, Jaipur
5. Miller G. T., 2004: Environmental Science: Working with the Earth, Thomson Brooks Cole, Singapore.
6. MoEF, 2006: National Environmental Policy-2006, Ministry of Environment and Forests, Government of India.
7. Singh, R.B. and Hietala, R. (Eds.) (2014) Livelihood security in Northwestern Himalaya: Case studies from changing socio-economic environments in Himachal Pradesh, India. Advances in Geographical and Environmental Studies, Springer

8. Odum, E. P. et al, 2005: Fundamentals of Ecology, Ceneage Learning India. 9. Singh S., 1997: Environmental Geography, Prayag Pustak Bhawan. Allahabad.
9. UNEP, 2007: Global Environment Outlook: GEO4: Environment For Development, United Nations Environment Programme.
10. Singh, M., Singh, R.B. and Hassan, M.I. (Eds.) (2014) Climate change and biodiversity: Proceedings of IGU Rohtak Conference, Volume 1. Advances in Geographical and Environmental Studies, Springer
11. Singh, R.B. (1998) Ecological Techniques and Approaches to Vulnerable Environment, NewDelhi, Oxford & IBH Pub..
12. Alc´antara-Ayala, I. (2002). Geomorphology, natural hazards, vulnerability and prevention of natural disasters in developing countries. Geomorphology, 47(2-4), 107-124.
13. Goudie, A., Ayala, I. A. (2010). Geomorphological hazards and disaster prevention. Cambridge University Press.
14. https://www.undrr.org/publications
15. http://sdmassam.nic.in/dmp.htmlddmp 17.
16. https://ndma.gov.in/sites/default/files/PDF/DMact2005.pdfhttp : //sdmassam.nic.in/pdf/publication/un

Theory Credit : 3
Practical Credit: 1
No. of Required Classes : 60
No. of Contact Classes: 40
No. of Non-Contact Classes : 20

Particulars of Course Designer (Department of Geography, Gauhati University, geography@gauhati.ac.in)

Four Year Under-Graduate Programme

Subject: Geography
Semester: VI
Course Name:**Introduction to Remote Sensing andGIS**
Course Code: GGY0600204
Course Level: Higher
Part I: Theory (3 Credits, 45 classes of one-hour duration)
Part II: Practical (1 Credit, 15 classes of two-hours duration)
100 Marks (Theory =45 Marks, Practical=25 Marks, Internal Assessment = 30 Marks)

Course Objective:

1. This paper is a core paper that intends to introduce students to the interface of Remote Sensingand GIS
2. It seeks to develop new insights among students on the relevance of geospatial studies within thefield of geography.

Course Outcome:

1. Interpret and analyze remote sensing data for different applications such as land, vegetation, and water
2. Apply the basics of GIS, its components, data types and structures in geographical Studies
3. Perform spatial analyses using GIS, including layer extraction, buffer, and proximity analysis
4. To understand the fundamentals of remote sensing theory and its historical developments
5. Demonstrate practical skills in aerial photo interpretation, digital classification, and GIS layer creation & analysis.

Unit I: Introduction to Remote Sensing

1. Remote Sensing: Definition and History of Development. (3 classes)
2. Principles of Remote Sensing System: Energy sources, EMR and its interaction with Atmosphere and Earth Features; Platform, Sensor and Resolutions; Aerial and Satellite Remote Sensing; Fundamentals of Photogrammetry.(6classes)
3. Remote Sensing data products, sources and characteristics; Elements of Image Interpretation (Visual & Digital); Digital Image Processing: Image Enhancement and Classification (Supervised and Un-supervised). (6classes)
4. Application of Remote Sensing: Land, Vegetation and Water (3 classes)

Unit II: Introduction to GIS

1. Geographical Information System (GIS): Definition, Development, Components, and Functions; Open source GIS. (3 classes)
2. GIS Data Types & Structures: Spatial and Non-Spatial Data; Raster and Vector Data Structure, Database Management System (DBMS). (3 classes)
3. Data Layer Extraction and Spatial Analysis: Buffer, proximity and viewshed analysis; overlay analysis. (4 Classes)
4. Application of GIS in geographical studies (site/habitat suitability analysis, network analysis, flood damage estimation) (4 classes)

Part II

Unit I: Practical Works (16 marks) (Two questions of 8 marks each)

1. Aerial photo interpretation and visual interpretation of satellite imagery and preparation of thematic maps. 2 assignments
2. Analysis of aerial photographs and satellite images: Determination of photo scale and object height from aerial photos (using a mirror stereoscope); Digital classification of satellite images:supervised and unsupervised. 3 assignments
3. Geo-referencing and Data layer creation: geometric correction, digitization of different layers using point, line and polygon, attribute data input and their thematic representation, Buffer analysis, Overlay analysis. (3 Assignments)

Unit II: Practical Note-Book and Viva-voce (9 Marks)

1. Evaluation of Practical Note-Book (5 marks)
2. Viva-voce (4 marks)

Reading List

1. Campbell J. B., 2007: Introduction to Remote Sensing, Guildford Press.
2. Jensen J. R., 2004: Introductory Digital Image Processing: A Remote Sensing Perspective, Prentice Hall.
3. Joseph, G. 2005: Fundamentals of Remote Sensing, United Press India.
4. Lillesand T. M., Kiefer R. W. and Chipman J. W., 2004: Remote Sensing and Image Interpretation, Wiley. (Wiley Student Edition).
5. Nag P. and Kudra, M., 1998: Digital Remote Sensing, Concept, New Delhi.
6. Rees W. G., 2001: Physical Principles of Remote Sensing, Cambridge University Press.
7. Singh R. B. and Murai S., 1998: Space-informatics for Sustainable Development, Oxford and IBH Pub.
8. Wolf P. R. and Dewitt B. A., 2000: Elements of Photogrammetry: With Applications in GIS,McGraw-Hill.
9. Sarkar, A. (2015): Practical Geography: A Systematic Approach. Orient Black Swan Private Ltd., New Delhi.
10. Chauniyal, D.D. (2010): Sudur Samvedanevam Bhogolik Suchana Pranali, Sharda Pustak Bhawan,Allahabad.
11. Burrough, P.A. and Mc Donnel, R.A.,1998: Principles of Geographical Information Systems,Oxford University Press.

Theory Credit : 3
Practical Credit: 1
No. of Required Classes : 60
No. of Contact Classes: 40
No. of Non-Contact Classes : 20

Particulars of Course Designer (Department of Geography, Gauhati University, geography@gauhati.ac.in)

Four Year Under-Graduate Programme

Subject: Geography
Semester: VI
Course Name:**Urban Geography**
Course Code: GGY0600304
Course Level: Higher
Part I: Theory (3 Credits, 45 classes of one-hour duration)
Part II: Practical (1 Credit, 15 classes of two-hours duration)
100 Marks (Theory =45 Marks, Practical=25 Marks, Internal Assessment = 30 Marks)

Course Objectives:

1. This paper introduces the students to the field of urban geography and its major aspects.
2. It seeks to develop new insights among students on the relevance of an urban geography and associated problems in a rapidly urbanizing world.

Course Outcome:

1. Comprehend the nature, scope, and trends of urban geography; understand classification of towns, and their origin and growth
2. Understand patterns of urbanization in various countries, components of urban growth, and decipher urban morphology through theories
3. Grasp distinct concepts in urban areas like city-region, urban agglomeration, rural-urban continuum, and decipher modern urban developments such as smart cities
4. Identify and analyze prevalent urban issues and problems, such as housing, slums, traffic congestion, pollution, and urban waste disposal
5. Evaluate trends and patterns of urbanization in India; familiarize with urban development policies and programs, and understand emerging urban issues in specific regions

Unit I:

Urban Geography: Nature and scope; approaches and trends in urban geography; Origin and growth of towns in global and national contexts; Types and characteristics of towns; Functional classification of towns; Schemes of city classification (J.M. Houston's, G. Taylor's and L. Mumford Schemes). (12 classes)

Unit II:

Patterns of Urbanisation in Developed and developing countries; Components of Urbanization and urban population growth; Organization of urban space: Urban Morphology and land use structure; Theories of the internal structure of Towns: the Sector Theory of Homer and Hoyt, and the Multiple Nuclei Theory of Harris and Ullman (10 classes)

Unit III:

Concept of city-region, urban agglomeration, urban sprawl, umland and periphery, rural-urban dichotomy and continuum, urban fringe, satellite town, new town, smart cities. (8 classes)

Unit IV:
Urban issues and problems: Housing, slums, civic amenities (transportation and drinking water), traffic congestion, pollution (air, land, water, noise), urban waste disposal and crime. (8 classes)

Unit V:
Urbanization and urban development planning in India: Trend and regional patterns of urbanization; national urban development policies and programmes; emerging urban issues in Delhi NCR, Mumbai and Guwahati. (7 classes)

Part II:

Unit I: Practical Works (16 marks) (Two questions of 8 marks each)

1. Plotting of million cities of India by using proportionate sphere method. (1 Exercise)
2. Map showing distribution of class I and II urban centres in Assam/NE India by using proportionate sphere method. (1 Exercise)
3. Determination of spatial mean centres of urban settlements using weighted (Population as weight) centrographic measure in Assam and NE India.(2 Exercises)
4. Calculation of distribution pattern of urban settlements in a District/State of N.E. Indiausing Nearest Neighbour Analysis. (1 Exercise)
5. Choropleth map showing spatial pattern of level of urbanization in Assam and N.E. India. (2Exercises)
6. Determination of rank-size relationship of urban centres in Assam/N.E. India/India. (1 Exercise)
7. Urban population potential mapping based on selected urban centres of Assam/N.E. India.(1 Exercise)
8. Delineation of urban influence zones of selected urban centres of Assam/N.E. India usingReilly's breaking point formula. (1 Exercise)

Unit II: Practical Note-Book and Viva-voce (9 Marks)
1. Evaluation of Practical Note-Book (5 marks)
2. Viva-voce (4 marks)

Reading List

1. Bala, R. (1986): Urbanisation in India, Rawat, Jaipur.
2. Bansal, S.C. (2010): Urban Geography, Meenakshi Prakashan, Meerut.
3. Fyfe N. R. and Kenny J. T., 2005: The Urban Geography Reader, Routledge.
4. Graham S.and Marvin S., 2001: Splintering Urbanism: Networked Infrastructures,Technological Mobilitiesand the Urban Condition, Routledge.
5. Hall T., 2006: Urban Geography, Taylor and Francis.
6. Kaplan D. H., Wheeler J. O. and Holloway S. R., 2008: Urban Geography, John Wiley.
7. Knox P. L. and McCarthy L., 2005: Urbanization: An Introduction to Urban Geography, Pearson Prentice Hall New York.
8. Knox P. L. and Pinch S., 2006: Urban Social Geography: An Introduction, Prentice- Hall.

9. Kundu, A. (1992): Urban Development and Urban Research in India, Khanna Publication,New Delhi. 42
10. Nangia, S. (1976): Delhi Metropolitan Region: A Study in Settlement Geography, RajeshPublication, New Delhi.
11. Pacione M., 2009: Urban Geography: A Global Perspective, Taylor and Francis.
12. Ramachandran R (1989): Urbanisation and Urban Systems of India, Oxford University Press,New Delhi
13. Sassen S., 2001: The Global City: New York, London and Tokyo, Princeton University Press.
14. Siddhartha K and Mukherjee S, (1996): Cities, Urbanisation and Urban Systems, Transworldmedia and communication, New Delhi
15. Singh, R.B. (Eds.) (2001) Urban Sustainability in the Context of Global Change, SciencePub., Inc., Enfield (NH), USA and Oxford & IBH Pub., New Delhi.
16. Singh, R.B. (Ed.) (2015) Urban development, challenges, risks and resilience in Asian megacities Advances in Geographical and Environmental Studies, Springer.

Theory Credit : 3
Practical Credit: 1
No. of Required Classes : 60
No. of Contact Classes: 40
No. of Non-Contact Classes : 20

Particulars of Course Designer (Department of Geography, Gauhati University, geography@gauhati.ac.in)

Four Year Under-Graduate Programme

Subject: Geography
Semester: VI
Course Name:**Surveying Techniques (Optional)**
Course Code: GGY0600404
Course Level: Higher
Part I: Theory (3 Credits, 45 classes of one-hour duration)
Part II: Practical (1 Credit, 15 classes of two-hours duration)
100 Marks (Theory =45 Marks, Practical=25 Marks, Internal Assessment = 30 Marks)

Course Objective:
This course on Surveying Techniques provides a general understanding of the field of surveying including the use of modern survey tools to enhance knowledge and skill for field-based geographic study. It focuses on various types of field survey instruments; principles of different types of ground surveying, and methods of carrying out surveys for the preparation of maps/plans for different spatial contexts.

Course Outcome:

1. Understand the meaning, types, and significance of field surveying 2. Learn the principles of plane, geodetic surveying and triangulation 3. Master the principles and techniques of several surveying tools
2. Gain proficiency in methods of radiation, intersection, traversing, contouring and leveling in surveying
3. Understand the basics of GPS, its principles and applications

Part I

Unit I:
Field surveying: Its meaning, types and significance in geography. (2 Classes)

Unit II:
Principles of surveying: plane and geodetic surveying; Principles of triangulation. (3Classes)

Unit III:
Principles and Techniques of surveying by Plane Table, Prismatic Compass, Theodolite, DumpyLevel and Total Station (8 Classes)

Unit IV:
Methods of radiation, intersection, traversing, contouring and leveling in surveying. (4Classes)

Unit V:
GPS: Basic concept, principles and utilities (3Classes)

Part II:

Unit I: Practical Works (16 marks) (Two questions of 8 marks each)

1. Preparation of a plan or a map of an area within the college campus or any suitable area using Plane Table (applying both radiation and intersection methods) (2 Assignments)
2. Open and Closed Traverse Surveying with Prismatic Compass: Preparation of plan alongwith adjustment of closing errors. (2 Assignments)
3. Closed Traverse Surveying with Theodolite: Plotting of data for preparation of a plan through computation of Reduced Bearing, Consecutive Co-ordinates and Independent Co-ordinates; Measurement of height of object/objects using Theodolite (2 Assignments)
4. Profile levelling and contouring in a selected area by Dumpy Level (2 Assignments)
5. Preparing a map of a short trail along with prominent features by using hand-held GPS and associated software/freeware. (2 Assignments)

Unit II: Practical Note-Book and Viva-voce (9 Marks)

1. Evaluation of Practical Note-Book (5 marks)
2. Viva-voce (4 marks)

Reading List

1. Campbell, J., 1984: Introductory Cartography, Prentice Hall Inc., Englewood Cliff.
2. Misra, R.P. and Ramesh, A., 1995: Fundamentals of Cartography, Concept Publishing Company, New Delhi.
3. Robinson, A.H., et al: Elements of Cartography, John Wiley Sons, New York. Raisz, E.: Principles of Cartography, McGraw Hills, London.
4. Kenetkar, T.P. and Kulkarni, S.U.: Surveying and Levelling, Vol. I II, Vidyarthi Gritha Prakashan, Pune.
5. Das, A.K. 2021: Pocket Size Handbook on Handling of GPS for Field Studies, GTAD and Aranyak, Guwahati (In PDF format).

Theory Credit : 3
Practical Credit: 1
No. of Required Classes : 60
No. of Contact Classes: 40
No. of Non-Contact Classes : 20

Particulars of Course Designer (Department of Geography, Gauhati University, geography@gauhati.ac.in)

Four Year Under-Graduate Programme

Subject: Geography
Semester: VI
Course Name:**Geography of North East India (Optional)**
Course Code: GGY0600504
Course Level: Higher
Part I: Theory (3 Credits, 45 classes of one-hour duration)
Part II: Practical (1 Credit, 15 classes of two-hours duration)
100 Marks (Theory =45 Marks, Practical=25 Marks, Internal Assessment = 30 Marks)

Course Objectives:

1. This paper intends to introduce students to the northeastern parts of India having a special identityamidst the Indian Union.
2. It seeks to develop new insights among students on the significance of geographical dimensions ofthe native region.
3. A field study is incorporated to make the students understand meso-regional diversity in respect ofits land, people and economy.

Course Outcome:

1. Understand geographical, climatic, and physiographic features of North-East India and their implications
2. Analyze demographic trends and social structures, including ethnicities, languages, and religions
3. Evaluate patterns and transformations in agricultural production, highlighting shifting cultivation and contemporary changes
4. Assess industrial development in relation to agriculture, with focus on regional industries and challenges they face
5. Examine transport, communication system and trade patterns in North-East India, emphasizing issues and potential of Act East policy

Part I

Unit I:
North-East India and its locational and strategic significance; Administrative divisions.; Physical setting: Physiographic divisions of NE India and their characteristics; Rivers and water bodies, Climate and its characteristics; forest cover; protected forest areas, soil types and their distribution.

Unit II:
Population: Trend of growth, variation in growth and distribution at state levels, ethnic composition; Age and sex composition; Linguistic and religious composition, literacy level, educational and healthcare infrastructures.

Unit III:
Production pattern and characteristics of agriculture in the region of rice, jute and tea at the state level; characteristics of shifting cultivation in the hill region; contemporary transformations in the agricultural sector including horticulture, Pisciculture etc.

Unit IV:
Agriculture and Industrial development scenario: Regional pattern of Industrial development, Distribution and production of coal, Petroleum and cement in the region; Potentiality of agro-based, handloom and handicraft industries in the region; problems of Industrial development in the region.

Unit V:
Transport, Communication system and trade: patterns of transport and communication systems (state level scenario); nature of trade in the region; problems and prospects of Act East policy towards improving the trade relations.

Part II:

Unit I: Practical Works (16 marks) (Two questions of 8 marks each)

1. Trend of population growth and growth rates in N.E. India since 1901 using Census data (Source: censusindia.gov.in). (2 assignments)
2. Choropleth mapping to show spatial variation in urbanization level in NE India. (1 assignment)
3. Spatial variation in the patterns of the religious composition of the population in NE Indiaand Social composition of the population (SC, ST and General) in N.E. India using a carto-statistical tool (2 assignments)
4. Trend of food grains production (Rabi and Kharif crops) in Northeast India using band-graph. (1assignment)
5. Map showing the distribution of major tribal groups in North-East India. (1assignment)

Unit II: Practical Note-Book and Viva-voce (9 Marks)

1. Evaluation of Practical Note-Book (5 marks)
2. Viva-voce (4 marks)

Reading List

1. Bhagabati, A.K., Bora, A. K. and Kar, B.K.: Geography of Assam, Rajesh Publications, New Delhi.
2. Taher, M and Ahmed, P.: Geography of North East India, Mani Manik Prakash, Guwahati. 3. Das,M..M.:PeasantAgricultureinAssam,Inter–IndiaPublications,NewDelhi.
3. Gopal Krishnan, R : Geography of North East India

4. Bhattacharya, P.2006 : Trend in Tourism Potentiality, Bani Mandir,Guwahati 6. Bhagabati, A.K.(ed):Biodiversity of Assam, Eastern Book House, Guwahati 7. Bhattacharyya, N.N. : North East India, Rajesh Publication, New Delhi
5. Srivastava, S.C. : Demographic Profile of N.E. India, Mittal Publications.
6. Basic Statistics of NE Inda, NEC, Shillong (various issues- accessible in PDF format) 10. India tourist statistics, Ministry of Tourism, Govt. of India (various issues - accessible in PDF format)

Theory Credit : 3
Practical Credit: 1
No. of Required Classes : 60
No. of Contact Classes: 40
No. of Non-Contact Classes : 20

Particulars of Course Designer (Department of Geography, Gauhati University, geography@gauhati.ac.in)