

P. G. AND RESEARCH DEPARTMENT OF
GEOGRAPHY

B.Sc., G E O G R A P H Y
SYLLABUS

Under CBCS system

2018 - 2019 Onwards



GOVERNMENT ARTS COLLEGE (AUTONOMOUS)
(Accredited by NAAC with 'A' Grade)
COIMBATORE - 641018

B.Sc., Geography Degree Course
UG - SCHEME OF EXAMINATIONS: CBCS PATTERN
 (For the students admitted during the academic year 2018 - 2019 and Onwards)

Part	Sub Code	Title of the Paper	Hrs (wk)	Internal (CA) Marks	External Marks	Total Marks	Ext- Min.	Total Pass Mark	Credits
Semester - 1									
I	18TAM11L	Part-I: Tamil - I	6	25	75	100	30	40	3
II	18ENG12L	Part-II: English - I	6	25	75	100	30	40	3
III	18BGE13C	Core – 1 : Geomorphology	6	25	75	100	30	40	4
III	18BGE14A	Allied – 1: Statistics – I	8	25	75	100	30	40	5
III	18BGE25P	Core – Practical – I Map Scales and Landscape Analysis	2	-					
IV	18ENV1GE	Environmental Studies	2	25	75	100	30	40	2
Semester – 1I									
I	18TAM21L	Part-I: Tamil II	6	25	75	100	30	40	3
II	18ENG22L	Part-II: English II	6	25	75	100	30	40	3
III	18BGE23C	Core: 2 Climatology	6	25	75	100	30	40	4
III	18BGE24A	Allied – II Statistics – II	8	25	75	100	30	40	5
III	18BGE25P	Core –Practical - I Map Scales and Landscape Analysis	2	40	60	100	24	40	5
IV	18VAL2GE	Value Education	2	25	75	100	30	40	2

Part	Sub Code	Title of the Paper	Hrs (wk)	Internal (CA) Marks	External Marks	Total Marks	Ext- Min.	Total Pass Mark	Credits
Semester – V									
III	18BGE51C	Core : - 5 Geography of India	5	25	75	100	30	40	4
III	18BGE52C	Core : - 6 Geography of World Resources	5	25	75	100	30	40	4
III	18BGE53C	Core : - 7 Regional Geography of the World	6	25	75	100	30	40	4
		Core - Practical – IV Survey, Air Photo and Image Interpretation	5	-					
IV	18BGE54S	Skill Based Subject – III: Principles of Remote Sensing	4	25	75	100	30	40	3
IV	18BGE5EL	Non-Major Elective Paper – I: Basics of Physical Geography	3	25	75	100	30	40	2
		Project and viva-voce	2						
Semester – VI									
III	18BGE61C	Core : - 8 Geography of Tamil Nadu	5	25	75	100	30	40	4
III	18BGE62C	Core : - 9 Political Geography	5	25	75	100	30	40	4
III	18BGE63C	Core : - 10 Ecology of the world	5	25	75	100	30	40	4
III	18BGE64P	Core - Practical – IV Survey, Air Photo and Image Interpretation	6	40	60	100	24	40	5
III	18BGE65V	Project & Viva – Voce	2	20	80	100	32	40	15
IV	18BGE66S	Skill Based Subject – IV: Fundamentals of GIS	4	25	75	100	30	40	3
IV	18BGE6EL	Non-Major Elective Paper – II: Basics of Human Geography	3	25	75	100	30	40	2
		Total/Credits				3500			140

PART	SUBJECT	PAPERS	CREDIT	TOTAL CREDITS	TOTAL MARKS
PART I	Language Tamil - I	4	3	12	400
PART II	English –I	4	3	12	400
PART III	Core	10	4	40	1000
	Core Practical	4	5	20	400
	Allied	4	5	20	400
	Project	1	15	15	100
PART IV	Special Lang & Non-Major Elective, Environmental Studies and Value Education	4	2	8	400
	Skill Based Subject	4	3	12	400
PART V	Extension Activities		1	1	-
Total				140	3500

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	GEOMORPHOLOGY	I	18BGE13C

Objectives: To understand about Landforms its origin and evolution.

To learn about the Geomorphic features in details.

UNIT – I: Geomorphology: Scope and content: - Interior of the earth – Diastrophism- Earthquakes – Volcanoes – Distribution – Classification of Folds and Fault.

UNIT – II: Origin of Continents and Oceans: Continental Drift Theory – Plate Tectonics – Isostasy.

UNIT – III: Rocks: Definition, origin and classification – Weathering: Definition and Classification – Mass Wasting: Types and classification – Soils: Formation, profiles and conservation.

UNIT – IV: Geomorphic Processes: Davisian’s Normal Cycle of Erosion: Fluvial – Erosional and Depositional landform features – Karst Topography.

UNIT – V: Geomorphic Processes: Erosional and depositional features of Glacier, Wind and Waves.

Reference Books:

1. Bloom, Arthur L. (1998), Geomorphology, Pearson Education Pvt. Ltd. Singapore.
2. Das Gupta, A and Kapoor, A.N., (2001). Principles of Physical Geography, S.C. Chand & Company Ltd, New Delhi.
3. Dayal, P., (1995). Text Book of Geomorphology, Shukla Book Depot, Patna.
4. Savindra Singh, (2002). Geomorphology, Prayag Pustak Bhawan, Allahabad.
5. Sharma, V.K., (1986). Earth Surface Process and forms, Tata McGraw Hill Publishing Company Ltd, New Delhi.
6. Strahler, A.N. and Strahler A.H., (1992). Modern Physical Geography, John and Wiley Sons, New York.
7. Thornbury, W.D., (1984). Principles of Geomorphology, John Wiley and Sons, New York.

Year	Subject Title	Sem	Sub Code
2018–19 Onwards	STATISTICS – I	I	18BGE14A

Objective: To impart the basic knowledge of Statistics and its various applications.

UNIT – I:

Meaning, Scope and Limitations of Statistics – Primary and Secondary Data – Methods of Collecting Primary Data – Sources of Secondary Data – Classification and Tabulation of Data.

UNIT – II:

Formation of Frequency Distribution – Presentation of Data – Diagrams: Bar Diagrams and Pie Diagram - Graphs: Histogram, Frequency Polygon, Frequency Curve and Ogives - Simple problems.

UNIT – III:

Measures of Central Tendency: Mean, Median, Mode, Geometric Mean and Harmonic Mean –Merits and Demerits – Properties of a Good Measure –Simple problems.

UNIT – IV:

Measures of Dispersion: Range, Quartile Deviation, Mean Deviation, Standard Deviation and Co-efficient of Variation - Skewness: Meaning – Measures of Skewness – Karl Pearson’s Co-efficient of Skewness and Bowley’s Co-efficient of Skewness - Simple problems.

UNIT – V:

Concept of Probability – Basic Concepts – Events – Equally Likely and Mutually Exclusive Events – Mathematical, Statistical Definitions of Probability – Addition and Multiplication Theorems (Without Proof) – Simple Problems.

Note: No derivation, only the Concepts and Simple Problems throughout the Syllabus.

Text Book:

1. S.P.Gupta - Statistical Methods, Sultan Chand & Sons, New Delhi, 42nd revised Edition, 2012.

Reference Book:

1. PA. Navneetham - Business Mathematics & Statistics, Jai Publishers, Trichy, July 2008.

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	CLIMATOLOGY	II	18BGE23C

Objectives: To understand about Atmosphere and its properties and Functions

To learn about the Atmospheric Pressure, Wind, Cloud and Classification.

UNIT – I: Climatology – Definition, aims and scope of Climatology- Atmosphere: Definition, Origin, Structure and Composition-Weather and climate.

UNIT – II: Insolation - Heat balance of the earth, Temperature: Measurement, Horizontal and Vertical Distribution – Factors affecting the Distribution of Temperature.

UNIT – III: Atmospheric pressure: Major pressure belts - Winds – Planetary, seasonal and local winds - Monsoon. Atmospheric Humidity – Condensation and clouds.

UNIT - IV: Precipitation – forms, types and distribution. Air masses: Types - Fronts: Types. Cyclones: Tropical and temperate.

UNIT – V: Climatic classification: Need and basis – Koppen’s classification – Climate Change: Global warming – El-Nino and La-Nino – Weather forecasting –types.

Reference Books:

1. Critch field, H.J., (1987). General Climatology, Prentice Hall of India Pvt. Ltd, New Delhi.
2. Lal, D.S., (1990). Climatology, Chatianya Publishing House, Allahabad.
3. Richmond W. Longley (1970). Elements of Meteorology, John Willey & sons inc, New York.
4. Savindra Singh, (2002). Physical Geography, Prayag Pustak Bhawan, Allahabad
5. Siddhartha, K., (2005). Atmosphere, Weather and Climate, Kisalaya Publications Pvt. Ltd., New Delhi.
6. Tewartha, G.T., (1980). Introduction to Climate, Tata McGraw Hill, New York.

Year	Subject Title	Sem	Sub Code
2018–19 Onwards	STATISTICS - II	II	18BGE24C

Objective: To impart the knowledge of Statistical Tools used for analyzing the geographical data.

UNIT – I:

Correlation – Scatter Diagram - Karl Pearson’s Co-efficient of Correlation - Spearman’s Rank Correlation – Regression – Construction of regression equations - Difference between Correlation and Regression – Simple Problems.

UNIT – II:

Sampling Methods – Advantages and Limitations – Sampling and Non-Sampling Errors – Random sampling methods - Simple Random, Systematic and Stratified Sampling Methods – Non-Random sampling methods (No Derivations, Only Concepts).

UNIT – III:

Sampling Distribution – Standard Error – Tests of Significance – Null and Alternative Hypotheses – Type I and Type II Errors – Large Sample Tests – Test for Single Mean, Difference of Means, Single Proportion and Difference of Proportions – Simple Problems.

UNIT – IV:

Small Sample Tests - Student’s ‘t’ test – Test for Single Mean and Difference of Means (independent and paired samples) – Chi-Square Test – Test for Independence of Attributes and Goodness of Fit – F-test for Equality of Two Variances.

UNIT – V:

Analysis of Variance – Assumptions – One way and Two way Classifications (No Derivations) – Simple Problems.

Text Book:

1. S.C.Gupta and V.K.Kapoor - Fundamentals of Mathematical Statistics, Sultan Chand & Sons, New Delhi, 11th revised Edition, June 2012.

Reference Book:

1. S.P.Gupta - Statistical Methods, Sultan Chand & Sons, New Delhi, 42nd revised Edition, 2012.

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	MAP SCALES AND LANDSCAPE ANALYSIS	II	18BGE25P

Objectives: To understand about Scale and its Types

To learn about Enlargement and Reduction of Maps, Contours, Slope and Drainage Basin.

UNIT –I: Map Scale: Methods of Representation of Scales - Statement, Representative Fraction - Graphical: Linear, Comparative and Diagonal.

UNIT – II: Enlargement and Reduction of Maps: Square and Triangle Methods - Measurement of Distance: Thread, Divider and Rotometer - Measurement of area: Square and Strip Methods: Planimeter.

UNIT – III: Representation of Relief: Contours – Interpolation and drawing relief features - Profile drawing: Simple, Serial, Super-imposed, Projected and Composite Profiles.

UNIT – IV: Stream Analysis: Ordering and Numbering - Stream order and Density of Drainage Basin - Altimetric Frequency Curve.

Reference Books:

1. Gopal singh, (1996), Map work and Practical Geography, Vikas Publishing House Pvt.Ltd.,
2. Khullar, (1997), Practical Geography, Educational Publishers, New Delhi.
3. Monkhouse, F.J. and Wilkinson, H.R., (1989), Maps and Diagrams, B.I.Publications, New Delhi.
4. Pijushkanti Saha and Partha Basu, (2010), Advanced Practical Geography, Books and Allied Pvt. Ltd, Kolkata.
5. Sethu Rakkayi, S., (2014), Puvippadaviyal oor Arimugam, Sree Meenakshi Offsets, Madurai.
6. Singh, R. L., (2005), Elements of Practical Geography, Kalyani Publishers, New Delhi.
7. Zulfequar Ahmad Khan, M. D., (1998), Text Book of Practical Geography, Concept Publishing Company, New Delhi.

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	OCEANOGRAPHY	III	18BGE33C

Objectives: To understand about Major Oceans and Bottom relief Features.

To learn about the Ocean Currents, Ocean Deposits and Conservation.

UNIT - I: Oceanography: Definition, Oceans and seas - Extent and distribution – Surface configuration of the Ocean floor, Hypsometric curve – Continental shelf – Continental slope – Abyssal Plain – Deeps and Trenches.

UNIT - II: Bottom Relief of the Pacific, Atlantic and Indian Oceans.

UNIT - III: Ocean Temperature and Salinity: Distribution and factors – Horizontal and vertical - Factors affecting temperature and salinity distribution.

UNIT - IV: Ocean Water Movement – Waves – Tides: Types - Ocean Currents: Types - Currents of Pacific, Atlantic and Indian Oceans.

UNIT - V: Ocean Deposits: Types - Coral Reefs: Formation and types - Ocean resources and need for conservation - National Institute of Ocean Technology (NIOT).

Reference Books:

1. Gupta, A and Kapoor A. N., (2001), Principles of Physical Geography, S.Chand & Company Ltd., New Delhi.
2. Lal D.S., (1990) Oceanography, Chatianya Publishing House, Allahabad.
3. Savindra Singh, (2004), Physical Geography, Prayag Pushtak Bhawan, Allahabad.
4. Savindra Singh, (2008), Oceanography, Prayag Pushtak Bhawan, Allahabad.
5. Sharma R.C., and Vital M. (1987), Oceanography for Geographers, Chatianya Publishing House, Allahabad.
6. Siddartha. K., (2005). Oceanography – A brief Introduction, Kisalaya Publications Pvt. Ltd., New Delhi.
7. Strahler, A.N. and Strahler A.H., (1992), Modern Physical Geography, John and Wiley Sons, New York.

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	CARTOGRAPHY	III	18BGE34A

Objectives: To understand about the historical development of Cartography. Map projections and Generalization

To learn about map reproduction Methods and Recent Trends.

UNIT – I: Cartography: Definition, scope and content - Map – Definition, types and uses - Development of Cartography.

UNIT – II: Map scales and Projections: Determination of map scales – Enlargement and reduction – Direction and Bearings – Co-ordinate system – Projections – Classification and uses.

UNIT – III: Map data: Collection and classification – Base map – Compilation – Generalization.

UNIT – IV: Map design and layout – Symbolization – Lettering, Standardization of Names – Styles - Mechanics of Map Construction: Drawing materials, Equipments and instruments.

UNIT – V: Thematic and complex Mapping – Topographic Mapping – Atlas Mapping – Mapping organizations of India: SOI, NATMO – Recent trends in Cartography.

Reference Books:

1. Erwin Raiz, (1948). General Cartography, McGraw Hill Company., New York.
2. Keates, J. S., (1982). Understanding Maps, Longman, London and New York.
3. Lawrence, G.R.P., (1979). Cartographic Methods, Methuen, London.
4. Misra, R.P. and Ramesh, A., (2002). Fundamentals of Cartography, Concept Publication Company, New Delhi.
5. Monkhouse, F.J. and Wilkinson, H.R., (1989), Maps and Diagrams, B.I.Publications, New Delhi.
6. Robinson, A.H., (1984). Elements of Cartography, John Wiley, London.
7. Sethu Rakkayi, S., (2014). Puvippadaviyal oor arimugam, Sree Meenakshi Offsets, Madurai.

	Subject title	Sem	Sub Code
2018 - 2019 Onwards	DISASTER STUDIES	III	18BGE35S

Objectives: To understand about the Natural Disasters its Causes and Consequences

To learn about Disaster Management and Mitigation.

UNIT - I: Disaster: Meaning and classification – Concepts of disaster – Hazard – Catastrophe – Risk and vulnerability – Disaster zones of India.

UNIT - II: Geological Hazards: Earthquakes - Scale of measurement - Intensity and magnitude - Earthquake prone zones - Volcanic hazards - Landslides and Tsunami.

UNIT – III: Climatic Disasters: Cyclones – Flood – Drought – Avalanche and Frost - Forest fire.

UNIT – IV: Human Induced: Thermal, Nuclear and chemical disaster – Health hazard, Global warming – Ground water depletion and deforestation.

UNIT – V: Disaster management organizations: International – National – State and Local level - NGO - Disaster Cycle – Preparatory phase – Emergency phase, Rehabilitation and Reconstruction process – Mitigation and management. NROM – NIDM – SDMC.

Reference Books:

1. Abbott, P.L. (1996), Natural Disasters, Wm. C. Brown Publishing Co., New York.
2. Agarwal Gurcharan Singh S.K., and Inderjeet Sethi, (1993), The Degrading Environment (cause of Concern) Commonwealth Publication, New Delhi.
3. Agarwal, S.K. (2004), Global Warming and Climate Change, A.P.H. Publications, New Delhi.
4. Ghosh G.K. (2008) Disaster Management, A.P.H. Publishing Corporation, New Delhi.
5. Goel, S. L. (2008), Disaster Management. Deep & Deep Publication Pvt.Ltd, New Delhi.
6. Kumaraswamy. K, (2009), GIS for Natural Resources and Disaster Management, Union offset printers, Tiruchirappalli.
7. Narayan, B. (2009), Disaster Management. A.P.H. Publishing Corporation, New Delhi.
8. Nicholas, K. (1995), Geohazards, Natural and human, Prentice hall of India, Delhi.
9. Saxena, H.M. (1996), Natural Disasters, Wm. C. Brown Publishing Co., New York.
10. Singh, R. B. (2008), Disaster Management, Rawat Publications. New Delhi.

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	HUMAN GEOGRAPHY	III	18BGE43C

Objectives: To understand about the Human Races around the World.

To learn about the Population and Migration Aspects.

UNIT – I: Human Geography: Scope and Content – Man and Environment relationships – Determinism, Possibilism and Neo-determinism.

UNIT – II: The Indigenous People: The Pygmies of Congo basin – The Badawins of Arabian desert – Eskimos of Arctic region – The Kirghiz of Central Asia – The Bushmen of Kalahari desert – Aborigines of Australia.

UNIT – III: Race and Racial Groups: Grifith Taylor’s Theory of Human Race - Ethnic groups in India and World - Indian Tribes - Gonds - Bhill - Naga – Santhal.

UNIT –IV: World Population: Factors – Distribution, Density and Growth - Language and Religion – Significance of Fertility and Mortality.

UNIT –V: Migration: Types, causes and consequences, current trends, Regenstein and Lee theory of migration.

Reference Books:

1. Balbeer Singh Negi, (2006), Human Geography- An Ecological approach, Kedarnath and Ramnath Publication, Meerut.
2. Goh Chengleong (2006), Certificate: Physical and Human Geography, Oxford University Press, London.
3. Goh Chengleong and Morgan (1975), Human and Economic Geography, Oxford University Press, London.
4. Majid Hussain (1999), Human Geography, Rawat Publications, Jaipur.
5. Money D.C (1967), Introduction to Human Geography, University Tutorial Press, London.
6. Perpillou (1967), Human Geography, A.V.H.G. Longman London.

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	MAP INTERPRETATION AND CLIMATIC DIAGRAMS	III	18BGE44P

Objectives: To understand about the Survey of India Topographic sheets, OS and USGS Maps
To learn about Indian daily weather report and climatic diagrams

UNIT – I: Topographic Maps: Conventional signs and symbols of SOI maps - Cartographic appreciation and comparison of SOI, OS and US sheets - Interpretation of SOI maps.

UNIT – II: Indian daily weather reports: Signs and Symbols – Interpretation – Station model – Cyclone cross section and tracking.

UNIT – III: Climatic diagrams: Climatic Graphs, Taylor’s Climograph – Hythergraph and Ergograph.

UNIT – IV: Wind rose: Simple, Star, Superimposed, Octagonal and Compound - Rainfall Dispersion Diagram.

Reference Books:

1. Gopal singh, (1996). Map work and practical geography, Vikas Publishing House Pvt.Ltd.,
2. Khullar, (1997). Practical Geography, Educational Publishers, New Delhi.
3. Monkhouse, F.J. and Wilkinson, H.R., (1989). Maps and Diagrams, B.I.Publications, New Delhi.
4. Pijushkanti Saha and Partha Basu, (2010). Advanced Practical Geography, Books and Allied (P) Ltd, Kolkata.
5. Singh, R. L., (2005). Elements of Practical Geography, Kalyani Publishers, New Delhi.
6. Zulfequar Ahmad Khan, M. D., (1998). Text Book of Practical Geography, Concept Publishing Company, New Delhi.

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	MAP PROJECTIONS AND REPRESENTATION OF STATISTICAL DATA	IV	18BGE45P

Objectives: To understand about the Map Projections, Types, Properties and Uses.

To learn about Representation of Graphical and Diagrams.

UNIT – I: Map Projections: Definition and Types - Construction, properties and uses of zenithal projection - Equal area, Gnomonic, Stereographic and Orthographic.

UNIT – II: Construction, properties and uses of conical projection - One standard and Two standard parallel – Bonne’s projection. Construction, properties and uses of cylindrical projection - Equi-distant and equal area – Mercator projection.

UNIT – III: Drawing of graphs: Line graph: Simple and Multiple – Polygon - Frequency curve – Histogram – Ogive.

UNIT – IV: Diagrams: Bar diagrams: Simple, Multiple and Compound - Circle – Sector – Pyramid – Dot Map – Choropleth – Flow Map.

Reference Books:

1. Gopal singh, (1996). Map work and practical geography, Vikas Publishing House Pvt.Ltd.,
2. Khullar, (1997). Practical Geography, Educational Publishers, New Delhi.
3. Monkhouse, F.J. and Wilkinson, H.R., (1989). Maps and Diagrams, B.I.Publications, New Delhi.
4. Pijushkanti Saha and Partha Basu, (2010). Advanced Practical Geography, Books and Allied (P) Ltd, Kolkata.
5. Sethu Rakkayi, S., (2014). Puvippadaviyal oor arimugam, Sree Meenakshi Offsets, Madurai.
6. Singh, R. L., (2005). Elements of Practical Geography, Kalyani Publishers, New Delhi.
7. Zulfequar Ahmad Khan, M. D., (1998). Text Book of Practical Geography, Concept Publishing Company, New Delhi.

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	GEOGRAPHY OF SETTLEMENTS	IV	18BGE46A

Objectives: To understand about the Origin and Development of Settlements, Types and Theories.

To learn about Rural, Urban Settlements and Characteristics.

UNIT – I: Geography of Settlements: Meaning, nature and scope – Settlement: Types. Fundamental concepts in Settlement Geography.

UNIT – II: Rural settlements: Concept, Characteristics and Factors - Types and Patterns. Regional characteristics – Morphology – Rural problem and planning.

UNIT – III: Urban settlements: Concept and Characteristics. Urbanization: Factors - urbanization in India and World - Functional Classification of urban centers.

UNIT – IV: CBD: Functions and characteristics - Urban Morphology: Classical models - Burgess, Homer Hoyt, Harris and Ullman - Rural–Urban Fringe.

UNIT – V: Hierarchy of urban centers - Rank-size rule - Central place theory - Urban Problems - Slums - Urban Planning.

Reference Books:

1. Bala, Raj (1986), Urbanisation in India, Rawat Publishers, Jaipur.
2. Kundu, A (1992), Urban Development and Urban Research in India, Khanna Publication, New Delhi.
3. Majid Hussain (1999), Human Geography, Rawat Publications, Jaipur.
4. Nath V. (2007), Urbanisation, Urban Development and Metropolitan Cities in India, Concept Publishing Co. New Delhi.
5. Pacione, Michael (2001), Urban Geography - A Global Perspective, Routledge, London.
6. Perpillou, (1967). Human Geography, A.V.H.G. Longman, London.
7. R. Ramachandran (1989), Urbanization and Urban Systems in India, Oxford University Press, Delhi,
8. R.B. Mandal (2009), Urban Geography: A Text Book; Concept Publishing Co., New Delhi.
9. Siddhartha K, (2013), Cities, Urbanisation and Urban Systems,kisalaya publication Pvt. Ltd New Delhi.
10. Singh, R. L., (1994). Geography of Settlements, Rawat Publications, New Delhi.
11. Vasant Kumar Bawa (1985), Indian Metropolis, Urbanization Planning and Management, Inter – India Publication, New Delhi.

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	TOURISM AND MANAGEMENT	IV	18BGE47S

Objectives: To understand about the Origin and Development of Tourism Sector and its Types.

To learn about Tourism Management, Organizations and Government Policy.

UNIT – I: Tourism: Definition –Types of tourism –Development in India –Tourism and economic importance.

UNIT – II: Tourism potentials in India: Tourist attractions – Religious, Recreations, Sports and games –Festivals – Medical tourism.

UNIT – III: Tourism management: Accommodation - Transport facility - Travel agencies - Publicity and marketing –Tourism visa - Passport and Tourist guides.

UNIT – IV: Tourism organizations: WTO – PATA and tourism organizations in India – ITDC – Functions –TTDC – Functions.

UNIT – V: Tourism in Tamil Nadu: Potential areas – Major tourist centers in Tamil Nadu – Planning and management – Government policy.

Reference Books:

1. Bhatia, A. K., (2010), Tourism Development – Principles and Practices, Sterling Publishers Pvt. Ltd., New Delhi.
2. Bhattacharya, P. (2006), Trend in Tourism Potentiality, Bani Mandir, Guwahati.
3. Douglas Pearce (1949), Tourism today – A Geographical analysis, Longman Publications, New York.
4. Khullar, N., (1985), Dynamics of Tourism, Sterling Publishers Pvt. Ltd., New Delhi.
5. Praveen Sethi (1999), Tourism in Developing Countries, Rajat Publications, New Delhi.

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	GEOGRAPHY OF INDIA	V	18BGE51C

Objectives: To understand about the Location and extent - Physical features and Climate of India.

To obtain about Agriculture, Mineral, Industries and Population aspects in India.

UNIT – I: Geographical setting - Physical features – Major Physiographic Divisions - Drainage – Climate - Soil and Natural Vegetation.

UNIT – II: Agriculture: Irrigation – Types and distribution – Major crops and their distribution: Rice, Wheat, Sugarcane, Cotton, Groundnut - Plantation Crops: Tea and Coffee - Agricultural Regions – Green revolution – Problems of Indian Agriculture.

UNIT – III: Recourses: Iron, Copper, Mica, Manganese, Bauxite, and Atomic minerals - Power Resources: Coal, Petroleum, Natural gas, Hydal Power – Multipurpose river projects - Atomic power stations – Need for non conventional energy sources.

UNIT – IV: Industries: Distribution and production of major industries: Cotton and textiles, Iron and Steel, Sugar, Cement, Chemical and Automobile – Major industrial regions.

UNIT – V: Population, Transport and Trade: Population – Growth, density, distribution and problems. Transport: Land, water and air - Foreign trade of India.

Reference Books:

1. Gopal Singh, (1970), A Geography of India, Atnaram & sons, New Delhi.
2. Khullar, D. R., (2010), India – A Comprehensive Geography, Kalyani Publishers, New Delhi.
3. Krishnan, M.S. (1982), Geology of India and Burma, CBS Publishers, New Delhi.
4. Majid Hussain (2008), Geography of India, Tata McGraw Hill Publishing company Ltd., New Delhi.
5. Mathur, S.M. (1982), Physical Geology of India, National Book Trust, India, New Delhi.
6. Pal, Saroj K. (2003), Physical Geography of India – A study in Regional Earth Sciences, Orient Longman Pvt. Ltd. Kolkata.
7. Sharma, T.C., (2003), India – An Economic & Commercial Geography, Vikas Publishing House Pvt. Ltd., New Delhi.
8. Singh, R.L., (1977), India - A Regional Geography, NGSI, Varanasi.

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	GEOGRAPHY OF WORLD RESOURCES	V	18BGE52C

Objectives: To understand about Natural Recourse, Types, Distribution and its Conservation

To learn about Agricultural, Minerals, Industrial Resources and Transport System.

UNIT – I: Geography of resources: Definition, scope and content – Classification and types - Soil resources: Classification and distribution, fertility, soil erosion and soil conservation - Forest Resources: Types, distribution, economic importance, forest products.

UNIT – II: Agricultural resources: Types, geographical distribution of Rice, Wheat, Tea, Coffee, Cotton and Sugarcane - Animal resources: Dairy farming - Fishing and major fishing grounds.

UNIT – III: Mineral resources: Types, significance and distribution of Iron ore, Bauxite, Copper, Gold and Manganese - Power resources: Distribution and production of Coal, Petroleum, Natural gas, Hydal, Nuclear and thermal power.

UNIT – IV: Industries: Locational factors and distribution of heavy industries – Iron and steel, Ship building, Automobile and Chemical - Cotton and Woolen - Paper and pulp - major industrial regions of the world.

UNIT –V: Transport system: Road, Rail, Air and Waterways –Inland waterways and Ocean routes - Trade: Composition of international trade, pattern, balance of trade, recent trends and trade organizations.

Reference Books:

1. Alexander, J.W., (2006), Economic Geography –Prentice Hall of India Pvt. Ltd. New Delhi.
2. Alka Gautham (2013), Geography of resources: Exploration, Conservation and Management, Sharda Pustak Bhavan, New Delhi.
3. Goh Cheng Leong, (1987), Human & Economic Geography, Oxford University Press, New York.
4. K.Siddhartha,(2004), Economic Geography, Kisalaya publications Pvt. Ltd.
5. Khanna, K.K. and Gupta, V.K., (2004), Economic and Commercial geography, Sultan Chand and sons, New Delhi.
6. Thomas R.S, (1968), Geography of Economic Activity, McGraw Hill Book Company, New Delhi.

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	REGIONAL GEOGRAPHY OF THE WORLD	V	18BGE53C

Objectives: To understand about Physiography and Drainage of the Major Continents of the World.

To obtain about Climatic, Soils and Natural Vegetations.

UNIT – I: Asia – Physiography – Drainage – Climate - Soils - Natural Vegetation.

UNIT – II: North America – Physiography – Drainage – Climate - Soils - Natural Vegetation.

UNIT – III: South America – Physiography – Drainage – Climate - Soils - Natural Vegetation.

UNIT – IV: Africa – Physiography – Drainage – Climate - Soils - Natural vegetation.

UNIT – V: Europe and Oceania – Physiography – Drainage – Climate - Soils - Natural Vegetation.

Reference Books:

1. Cole, J. (1996), A Geography of the World's Major Regions, Routledge, London,
2. Darshan singh manku (1998), A Regional Geography of the world, kalyani publishers, New Delhi.
3. Deblij, H.J. (1994) Geography : Regions and Concepts, John Wiley, New York,
4. Dudley Stamp (1979), Asia – A regional and economic Geography, Orient B.I. publisher's Pvt Limited, New Delhi.
5. Dudley Stamp(1979), The World Regional Geography, Orient Longman Limited, New Delhi.
6. Jackson, R.H. & Hudman. L.E. (1991)World Regional Geography : Issues for Today, John
7. Singh, R.L., (1971), India - A Regional Geography. NGS. Varanasi.
8. Ward P.W. & Miler, A.(1989) : World Regional Geography : A Question of Place, John Wiley, New York.

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	BASICS OF PHYSICAL GEOGRAPHY	V	18BGE5EL

Objectives: To understand about the Universe, Galaxy and Solar System.

To obtain about Major Continents, Atmosphere and Oceans of the Earth

UNIT – I: Universe – Galaxy - Solar System – Earth – Movements – Latitude – Longitude International date Line.

UNIT – II: Major Continents – Plates – Mountains – Plateau – Plains – Deserts and Islands.

UNIT – III: Interior of the Earth –Earthquake and Volcano- Fold and Fault.

UNIT – IV: Atmosphere – Structure and Composition – Pressure belts – Winds – Clouds – Precipitation – Types. Climate change and Global Warming.

UNIT – V: Major Oceans – Ocean bottom relief features – Salinity – Ocean Currents – Wave and Tides.

Reference Books:

1. Bloom, Arthur L. (1998), Geomorphology, Pearson Education Pvt.Ltd. Singapore.
2. Das Gupta, A and Kapoor, A.N., (2001), Principles of Physical Geography, S.C. Chand & Company Ltd, New Delhi.
3. Dayal, P., (1995), Text Book of Geomorphology, Shukla Book Depot, Patna.
4. Savindra Singh, (2004), Physical Geography, Prayag Pustak Bhawan, Allahabad.
5. Sharma, V.K., (1986), Earth Surface Process and forms, Tata McGraw Hill Publishing Company Ltd, New Delhi.
6. Strahler, A.N. and Strahler A.H., (1992), Modern Physical Geography, John and Wiley Sons, New York.
7. Thornbury, W.D., (1984), Principles of Geomorphology, John Wiley and Sons, New York.

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	PRINCIPLES OF REMOTE SENSING	V	18BGE55S

Objectives: To understand about the History and Types of Remote Sensing.

To obtain about Aerial, Satellite Remote Sensing and Recent Developments.

UNIT – I: Remote Sensing: Historical development - Definition - Types – EMR – Ideal remote sensing system.

UNIT – II: Electromagnetic radiation: EMR interaction with earth and atmosphere – Basic principles – Platforms.

UNIT – III: Aerial Remote Sensing: Principles – Types - Stereoscopic vision – Elements of interpretation.

UNIT – IV: Satellite Remote Sensing: Types of satellite – Orbits – Resolution – Sensors – Resolutions and characteristics of LANDSAT – SPOT.

UNIT – V: Remote sensing in India: ISRO – NRSC – IRS Satellites – Sensors – Resolution characteristics and applications - Recent development of remote sensing in India – CARTOSAT and OCEANSAT.

Reference Books:

1. Anji Reddy, M., (2004), Geoinformatics for Environmental Management, BS Publications, Hyderabad.
2. Chanrda, A.M. and S.K. Ghosh (2006), Remote Sensing and Geographical Information System, Narosa Publishing House, New Delhi.
3. Curran, P.J., (1985), Principles of Remote sensing, English Language book society Longmans, London.
4. Joseph, George (2003), Fundamental of Remote Sensing, University's Press (India) Pvt. Ltd., Hyderabad.
5. Kumar, S., (2003), Basics of Remote sensing and GIS, Laxmi publications, New Delhi.
6. Lillesand, T.M. and Ralph W. Keifer (2002), Remote Sensing and Image Interpretation, John Wiley & Sons, Inc., New York.
7. Panda, B.C., (2005), Remote Sensing: Principles and Applications, Viva Books Pvt. Ltd., New Delhi.
8. Sabins, Jr. (1978), Remote Sensing: Principles and Interpretation, Freeman and Co, Sanfrancisco.
9. Singh Surendra and A.N. Patel (1999), Principles of Remote Sensing, Scientific Publishers (India), Jodhpur.

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	GEOGRAPHY OF TAMIL NADU	VI	18BGE61C

Objectives: To understand about the location, Physiography and Climate of Tamil Nadu

To learn about Agricultural, Minerals, Industrial and Human Resources of Tamil Nadu.

UNIT – I: Geographical setting - Physical divisions – Climate – Rivers - Soils and Natural vegetations.

UNIT – II: Agriculture and Irrigation: Types and distribution – Problems – Major crops: Paddy, Sugarcane, Cotton and Groundnut - Plantation crops: Tea, Coffee and Rubber.

UNIT – III: Minerals and power resources: Coal, Iron ore, Petroleum, Atomic and Thermal power - Major Hydal projects – Non-conventional energy sources: Solar and Wind energy.

UNIT – IV: Industries: Cotton textiles – Cement – Sugar – Chemical - Paper Industry and Automobiles.

UNIT – V: Human Resources: Transport and Trade: Population growth and distribution – Rural and Urban population – Transport: Major Roadways and Railways - Trade.

Reference Books:

1. Gopal Singh (1988), A Geography of India, Atnaram & sons, New Delhi.
2. Kullar, D. R. (2010), India: A Comprehensive Geography, Kalyani Publishers, New Delhi.
3. Kumaraswamy,V. (2014), Geography of Tamil Nadu, Sakthi Abrami Publishers, Kumbakonam.
4. Ramesh, A and Tiwari, P.S., (1983), Basic Resources Atlas of Tamil Nadu, Dept. of Geography, University of Madras, Chennai.
5. Sharma, T.C. (2003), India: An Economic & Commercial Geography, Vikas Publishing House Pvt. Ltd., New Delhi.
6. Velappan, D., (1986), Economic Development of Tamil Nadu – Emerald Publishers, Chennai.

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	POLITICAL GEOGRAPHY	VI	18BGE62C

Objectives: To understand about origin and development Political Geography

To learn about state, Capitals, Elections and India's Foreign Policy.

UNIT – I: Political Geography – Definition, scope, content and development – Geopolitics - State: Powers and functions of the state – Categories of the state - Nations and Nationalism.

UNIT – II: Core areas: Types, Capitals – Types, Morphological classification, Factors of development, Federal capitals – New and neutral capitals – Capitals in post -1945 federations.

UNIT – III: Boundaries and Frontiers: Definition, boundary classification, Genetic and functional, Morphological classification (Buffer zone – Land locked countries) – Border disputes.

UNIT – IV: Electoral Geography: Geography of elections – Geography of campaigning, Voting pattern, Voters participation – Opinion poll – Gerry Mandering – Election Commission.

UNIT – V: Political Geography of India: Integration of Indian states – Integration of Sikkim – India's bilateral relationship with China, Pakistan and Sri Lanka – SAARC countries - India's foreign policy.

Reference Books:

1. Adhikari, Sudepta (2008), Political Geography of India, Sharda Pustak Bhawan, Allahabad.
2. Bose, Sugata and Ayesha Jalal (eds.) (1998), Nationalism, Democracy and Development, Oxford University Press. New Delhi.
3. Brass, Paul (1992), Politics of India since Independence, Cambridge University Press. Cambridge.
4. Cohen Sayl, B., (1973), Geography and Politics in a divided world, OUP, New York.
5. De Blij Harm, J., (1980), Systematic Political Geography, John Wiley and sons, New York.
6. Dikshit, R.D. (1975), Political Geography of Federalism: An Inquiry into Origins and Stability, Macmillan publication. New Delhi.
7. Dikshit, R.D. (1982). Political Geography: A contemporary perspective, McGraw Hill Publishing co., New Delhi.
8. Muir, R., (1981). Modern Political Geography, Macmillan, London.
9. Panikkar, K.M. (1955), Geographical Factors in Indian History, Bharatiya Vidya Bhawan. Mumbai.
10. Presscott, J.R.V., (1972), Political Geography, Methuen, London.
11. Singh, Chandra Pal (1994), Readings in Political Geography, Heritage Publishers. New Delhi.
12. Sudeeptha Adhikari, (2004), Political Geography, Rawat publications, New Delhi.
13. Taylor and Peter (1972), Political Geography, Methuen, London.
14. Taylor, Peter and Collin Flint (2000), Political Geography: World Economy, Nation-State and Locality, Prentice Hall. New York.

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	ECOLOGY OF THE WORLD	VI	18BGE63C

Objectives: To understand about regional studies of the world.

To learn about Equatorial, Tropical, Temperate and Polar Regions.

UNIT – I: Equatorial Regions – Amazon type and Equator type: Situation, Extent, Climate, Natural vegetation, Flora and fauna, Natural resources, Human life and economic development.

UNIT – II: Tropical Regions – Monsoon, Sudan, Sahara and Caribbean - Situation, Extent, Climate, Natural vegetation Flora and fauna, Natural resources, Human life and Economic development.

UNIT – III: Warm temperate Regions – Mediterranean, China and Steppe - Situation, Extent, Climate, Natural vegetation, Flora and fauna, Natural resources, Human life and Economic development.

UNIT – IV: Cool temperate Regions – West European, Lawrence, Prairie - Situation, Extent, Climate, Natural vegetation, Flora and fauna, Natural resources, Human life and Economic development.

UNIT – V: Cool temperate Polar Regions – Taiga and Tundra - Situation, Extent, Climate, Natural vegetation, Flora and fauna, Natural resources, Human life and Economic development.

Reference Books:

1. Cole, J. (1996), A Geography of the World's Major Regions, Routledge, London,
2. Darshan singh manku (1998), A Regional Geography of the world, kalyani publishers, New Delhi.
3. Deblij, H.J. (1994), Geography: Regions and Concepts, John Wiley, New York.
4. Dudley Stamp (1979), Asia – A regional and economic Geography, Orient B.I. publisher's Pvt Limited, New Delhi.
5. Dudley Stamp (1979), The World Regional Geography, Orient Longman Limited, New Delhi.
6. Dudley Stamp, (1979), The World Regional Geography, Orient Longman Limited, New Delhi.
7. Goh Cheng Leong (1982), Human & Economic Geography, Oxford University Press, New York.
8. Jackson, R.H. & Hudman. L.E. (1991), World Regional Geography : Issues for Today, John Wiley, New York.
9. Khanna, K.K. and Gupta, V.K., (1988), Economic and Commercial geography, Sultan Chand and Sons, New Delhi.
10. Singh, R.L., (1971), India: A Regional Geography, NGSI, Varanasi.
11. Ward P.W. & Miler, A.(1989) : World Regional Geography : A Question of Place, John Wiley, New York.

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	SURVEYING, AERIAL PHOTO AND IMAGE INTERPRETATION	VI	18BGE64P

Objectives: To understand about basics and uses of survey and GPSS.

To learn aerial photos and satellite imageries.

UNIT – I: Surveying: Chain surveying - Open and closed traverses, Prismatic compass - Open and closed traverses, Closing error in closed traverse methods. Plane table surveying - Radiation and intersection method. GPSS Survey - Observation, co-ordinate measurements – Point, line, area.

UNIT – II: Elevation measurement and Leveling: Elevation measurement in degrees using Indian Clinometer and Abney level, Dumpy level – Level difference and Elevation measurement.

UNIT – III: Aerial remote sensing: Elements of visual interpretation - Marginal of photographs - Stereoscopic vision test - Visual Interpretation of aerial photographic features.

UNIT – IV: Satellite remote sensing: Marginal information of satellite and satellite image interpretation features.

Reference Books:

1. Curran, P.J., (1985), Principles of Remote sensing, English Language book society Longmans, London.
2. Lillesand, T.M. and Kiefer, R.W., (1979), Remote Sensing and Image Interpretation, John Wiley and sons, New York.
3. Misra, R.P. and Ramesh, A., (2002). Fundamentals of Cartography, Concept Publication Company, New Delhi.
4. Monkhouse, F.J. and Wilkinson, H.R., (1989), Maps and Diagrams, B.I.Publications, New Delhi.
5. Pijushkanti Saha and Partha Basu, (2010), Advanced Practical Geography, Books and Allied (P) Ltd, Kolkata.
6. Rampal, K.K. (1999) Handbook of Aerial Photography and Interpretation, Concept Publishing Co., New Delhi.
7. Robbert, G. Reaves et.al. (1981) Manual of Remote Sensing (eds.), Fourth Edition, Vol. I & II, American Society of Photogrammetry, Falls Church, U.S.A.
8. Sabins, Jr. (1978), Remote Sensing: Principles and Interpretation, Freeman and Co, Sanfrancisco.

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	BASICS OF HUMAN GEOGRAPHY	VI	18BGE6EL

Objectives: To understand about major races of the world.

To learn about economic activities, agriculture, mineral and industrial distribution of the world.

UNIT – I: Human Geography: Nature and scope - Man and Environment relationship - Growth, Distribution and Problems of world population.

UNIT – II: Human races: Types and Distribution – Occupations - Important Tribes: Eskimo, Pygmy, Bushman, Gond and Irula - Their adaptation to the environment - Social and Economic activities.

UNIT – III: Economic Geography: Definition, Nature and Scope - Natural resources: Water, Forests, Soil – Distribution and conservation - Energy resources: Coal, Petroleum, Atomic and Hydal Power.

UNIT – IV: Agriculture: Types - Geographical condition and Distribution of Wheat, Rice, Sugarcane, Cotton, Tea, Coffee.

UNIT – V: Minerals: Distribution - Iron ore, Copper, Manganese and Mica – Distribution of Industries: Iron and Steel, Cotton Textiles.

Reference Books:

1. Balbeer Singh Negi, (2006), Human Geography- An Ecological approach, Kedarnath and Ramnath Publication, Meerut.
2. Goh Chengleong (2006), Certificate: Physical and Human Geography, Oxford University Press, London.
3. Goh Chengleong and Morgan (1975), Human and Economic Geography, Oxford University Press, London.
4. Majid Hussain (1999), Human Geography, Rawat Publications, Jaipur.
5. Money D.C (1967), Introduction to Human Geography, University Tutorial Press, London.
6. Perpillou (1967), Human Geography, A.V.H.G. Longman London.

Year	Subject title	Sem	Sub Code
2018 - 2019 Onwards	FUNDAMENTALS OF GIS	VI	18BGE66S

Objectives: To understand about the development and components of GIS.

To learn about DBMS, Modules and Application of GIS.

UNIT – I: GIS: Definition - Components – Development - GIS and Geography – Digital Cartography.

UNIT – II: GIS data: Spatial and Non-Spatial - Sources– Data structure: Raster and Vector.

UNIT – III: Data Base Management System: Structure, Functions and Organizational aspects – RDBMS - GIS software: Data Storage –Analysis –Buffering –Overlay.

UNIT – IV: GIS modules: Network, TIN, DTM, DEM and Trends in GIS.

UNIT – V: Application of GIS – Agriculture –Environment- Urban - Disaster – Water Resources.

Reference Books:

1. Anji Reddy, M., (2004), Geoinformatics for Environmental Management, BS Publications, Hyderabad.
2. Chang, Kang-tsung (2002), Introduction to Geographic Information Systems, Tata McGraw Hills Publishing Company Ltd, New Delhi.
3. Ian Heywood, (2009), An Introduction to Geographical Information System, Pearson Education Pvt. Ltd., New Delhi.
4. Kang-tsung chang, (2006), Introduction to Geographic Information systems, Tata McGraw – Hill Publishing Company Limited, New Delhi.
5. Kumar, S., (2003), Basics of Remote sensing and GIS, Laxmi publications, New Delhi.
6. LO, C.P., Albert K.W.Yeung, (2007), Concepts and Techniques of Geographic Information Systems, Prentice-Hall of India, New Delhi.
7. Peter, A. Burrough Rachael, A. and McDonnell, (1998), Principles of Geographical Information Systems, Oxford University Press Inc., New York.
8. Siddique, M.A. (2006), Introduction to Geographical Information Systems, Sharda Pustak Bhawan, Allahabad.

Year	Subject Title	Sem	Sub Code
2018 - 2019 Onwards	Project and viva-voce	VI	18BGE65V

Objectives:

To understand about the various research methods and its applications

To familiarize about data collection, types, analysis, interpretation and report with suggestion

Write –up: general guidelines:

S. No.	Title
1	Introduction
2	Statement of the problem
3	Relevance of the study
4	Review of literature
5	Aim and objectives
6	Data and tools
7	Methodology
8	Data arrangements, Analysis and Interpretation
9	Results and discussions
10	Summary and Conclusions
11	References
12	Appendices

- The total number of pages should be minimum of 60, including text, figures, tables, photographs, references and appendices.
- The viva-voce presentation is with the help of equipment which are available in the department.

MODEL QUESTION PAPER

B.Sc., GEOGRAPHY

TIME : 3 Hours

Maximum Marks : 75

SECTION – A

10 x 2 = 20

Answer all questions

All answer carry equal marks

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

{Two questions from each UNIT to be set}

SECTION – B

5 x 5 = 25

Answer all questions

All answer carry equal marks

11. a) or
b)
12. a) or
b)
13. a) or
b)
14. a) or
b)
15. a) or
b)

{Two Questions from each UNIT to be set questions
either (a) or (b) type }

SECTION – C

3 x 10 = 30

Answer any THREE questions out of FIVE questions given

All answer carry equal marks

- 16.
- 17.
- 18.
- 19.
- 20.

{One question from each UNIT to be set}
