

PERIYAR UNIVERSITY

SALEM-636 011

B.Sc - GEOGRAPHY SYLLABUS

UNDER CHOICE BASED CREDIT SYSTEM (CBCS)

(STUDENTS ADMITTED FROM THE ACADEMIC YEAR -
2008-2009 ONWARDS)

Eligibility for Admission

A Candidate who has passed higher secondary examination in Geography, Maths, Science and other Arts Subjects under higher secondary board of Examinations, Tamil Nadu or as per the norms set by the Government of Tamil Nadu or an Examination accepted as equivalent by the Syndicate subject to such conditions as may be prescribed thereto are permitted to appear and qualify for the B.Sc Geography degree Examination of this university after a course of study of three academic years.

B.Sc-GEOGRAPHY
SEMESTER-I
Course-I CLIMATOLOGY

Code-

Unit-I: Weather and Climate- Definition-Atmosphere-Structure and Composition Insolation –Heat Balance of the Atmosphere-Distribution of Temperature.

Unit-II: Atmospheric Pressure-Vertical and Horizontal distribution-pressure Belts-Winds:- Planetary, Seasonal and Local Winds.

Unit-III: Atmospheric Moisture-Condensation –Classification of Clouds –Forms of Precipitation –Types of Rainfall-Monsoon: Origin and its importance.

Unit-IV: Air masses: Properties and Classification–Formation of the Fronts-Types of Fronts-Cyclones: Tropical and Temperate cyclones-Anti-cyclones.

Unit-V:Classification of climates-Basis of classification-Koppen Climatic classification-Distribution of world climates.

Reference Books:

1. An Introduction to climatology----- Trewartha.
2. Climatology -----Austin Miller
3. Climatology ----- D.S.Lal.
4. Physical Geography ----- Strahler and Strahler.
5. Physical Geography ----- Philip Lake.
6. Physical Geography -----Savindra Singh.
7. Physical Geography -----Majid Hussain.

Semester-II

Course-II- OCEANOGRAPHY

CODE-

UNIT-I: Oceanography: Definition-Formation and Distribution of Oceans and Continents- Tetrahedral Theory- Surface Configuration of the Ocean Floor- Hypsometric Curve.

UNIT-II: Types of Lands Forms at the Ocean Bottom- Submarine Relief Features of Atlantic, Pacific and Indian Ocean.

UNIT-III: Characteristics of Ocean Waters- Temperature- Vertical and Horizontal Distribution–Salinity- Factors Controlling the Salinity of the Atlantic, Pacific and Indian Ocean.

UNIT-IV: Ocean Circulations- Ocean Currents found in Atlantic, Pacific and Indian Oceans- Waves and Tides.

UNIT-V: Deposits of the Ocean floor- Types of Marine Deposits and their Distribution-Coral Reefs- Types of Coral Reefs- Darwin's Theory of Coral Formation-Ocean as Resources Reserve.

Reference Books:

1. Sharma .R.C and Vatal- Oceanography for Geographers.
2. Jerald's-An Introduction to General Oceanography.
3. King.K.L- Oceanography.
4. Carter –Oceanography.

Semester-II
Practical –Core Course-I-Maps and Scales

Paper code-

UNIT-I: Scales-Types of Scales: Construction of Linear, Comparative and Diagonal Scales-Conversion of Scales.

UNIT-II: Measurement of Distances and Areas-Enlargement and Reduction – Combination of Maps- Directions and Bearings- Conversion – Methods of Finding Truth North- Map settings.

UNIT-III: Representation of Relief Features- Interpolation of contours- Contour diagrams with cross sections.

UNIT-IV: Representation of climatic data- Temperature, Rainfall and wind data- Drawing of simple and polygraphs.

UNIT-V: Climatic Graphs-Climographs, Hythergraphs, Ergograph, Wind Rose Diagrams.

REFERENCE BOOKS:

1. Monkouse and Wilkinson- Maps and Diagrams.
2. Gopal Singh-Elements of Practical Geography.
3. Misra. R.P and Ramesh-Fundamentals of Cartography.
4. Austin miller-The Skin of the earth.

SEMESTER-III
Course-III—GEOMORPHOLOGY
Code:

UNIT-I Basics of Geomorphology: Meaning-Earth plates-Continental Drift Theory-Isostasy-Earth Movements: Earthquakes and Volcanoes.

UNIT-II Denudational Process-Rocks: Formation and Types-Folds and faults:—types-Weathering types-MassWasting-Denudational activities-Aggradation and Degradation.

UNIT-III Denudational activities of river: Drainage Patterns-Fluvial Cycle-Davis Concept-Erosional and Depositional Features.

UNIT-IV Denudational activities of Glaciers and Waves: Types of Glaciers and Waves-Erosional and Depositional Landform Features.

UNIT-V Denudational activities Underground Water and Wind: Erosional and Depositional Features.

REFERENCE BOOKS:-

1. Worcester- A Text of Geomorphology.
 2. Wool ridge and Morgan .R.S- An outlines of Geomorphology.
 3. Thornbury.W.D. Principles of Geomorphology.
 4. Strahler.A.N. and Strahler.A.N- Physical Geography.
 6. Savindra Singh-Geomorphology.
 7. Savindra Singh- Physical Geography.
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SEMESTER-IV

Course-IV- GEOGRAPHY OF TAMILNADU

Code-

Unit-I: General Aspects: Location: Physiographic Units-Climate and Seasons-Rainfall variation and distribution. Soil types and Distribution-Forest Types and Distribution.

Unit-II: Agriculture: Importance of Agriculture –Distribution of the following crops. a) Paddy b) Cotton c) Sugar cane d) Tea e) Coffee.

Unit-III: Economic Base: Minerals: Distribution and production of:
a) Iron b) Bauxite c) Limestone.
b) Power Resources: - a) Coal b) Natural Gas and Petroleum.
c) Industries: a) Cotton b) Sugar c) Cement d) Automobiles.

Unit-IV: Population: Growth and Distribution:- Rural and Urban Population-Density of Population-Literacy rate-Birth and Death Rate.

Unit-V: Transportation: Types and Distribution - Road, Railways and Air ways-Important Ports.

REFERENCE BOOKS:-

1. Indian Geographical Socieity-This is Tami Nadu .
2. Kumarasmy.K-Geography of Tamil Nadu.
3. Ramesh.A and Tiwari.P.S-Basic Resource Atlas of Tamil Nadu.

Semester-IV
Practical Core Course-II- Map Interpretation and Data
Representation

Code-

UNIT-I Meteorological Signs and Symbols-Station model-Study and Interpretation of Weather Reports of India (January, July, May and November only)

UNIT-II Conventional Signs and Symbols in Indian Topographical Maps- Interpretation of Indian Topographical Maps-Plains, Plateaus, Hills and Mountains only)

UNIT-III Representation of Economic Data: One Dimensional diagrams: Bars-Two Dimensional Diagrams:-Rectangular, Squares and Circles-Three Dimensional Diagrams:-Cubes and Spheres.

UNIT-IV Pyramidal Diagrams-Pictorial- Flow Line and Pie Diagrams.

UNIT-V Methods of Representing Distribution of Data-Drawing of Isopleths, Choropleths, Chorochromatic and Choroschematic Maps.

REFERENCE BOOKS:

1. F.J.Monkhouse and H.R.Wilkinson – Maps and Diagrams.
- 2 . Misra .R.P & Ramesh.A Fundamentals of Cartography.
3. Gopal Singh- Map work and Practical Geography.
4. Zamir Ali–Text book of Practical Geography.
5. B.S.Nagi- Practical Geography.
6. Pijushkanti Saha and Partha Basu-Advanced Practical Geography.

SEMESTER-V

COURSE- V–HUMAN GEOGRAPHY

Code-

UNIT-I Basics: Scope and Content of Human Geography-Interrelationship between Man and Environment- Concepts –Determinism and Possibilism- Neo-Determinism and Probablism.

UNIT-II Human Habitats-Meaning and types-Mode of life in Equatorial regions, Tropical Deserts, Temperate Grass lands and Tundra region..

UNIT-III Race - Major Races:-Caucasoid, Mongoloid and Negroid-Distribution –Racial Conflicts and Racial Prejudice.

UNIT-IV Religion: Distribution of world religion:Hinduism, Christianity, Islam, Buddhism and Judaism .

UNIT-V Languages: Major world Languages and their distribution-Geographical factors –Significances.

REFERENCE BOOKS:

1. Majid Husian-Human Geography.
2. G.T.Trewarta-Geography of Population.
3. Goh Chenleong and Gilan C.Morgan - Economic and Human Geography.

Semester-V
COURSE-VI-GEOGRAPHY OF POPULATION AND SETTLEMENTS

Code-

Unit-I Population: As a Resource and Constraints to Development-Factors influencing the Distribution and Density, Factors affecting growth of population of the world-Problems of over population and under population.

Unit-II Migration-Historic and Contemporary Migrations-Types of Human Migration-National, International, Voluntary and Forced Migration-Causes and Consequences of Migration.

Unit-III Settlements: Definition, Site and Situation of Rural settlements, Factors influencing Settlement Patterns, Classification of Settlements: Rural and Urban.

Unit-IV Structure of Towns: Theories relating to the morphology of town.
a)Concentric Zone Theory
b)Circle and Sector theory and
c)Multiple Nuclei Theory

Unit-V Urban and Urbanization: Meaning-Classification of Towns and Cities, Site and Situation and Functions-Urban hierarchy and Hinterland-Patterns of Urbanisation in India.

Reference Books:

1. G.T.Trewartha-Geography of Population.
2. Clerk- Geography and Population.
3. J.H.Johnson-Principles of Demography.
4. Cole & King- Urban Geography.
5. Mayor and Kohn- Urban Geography.
6. R.L.Singh-Geography of Settlements.

SEMESTER-VI

COURSE-VII- AGRICULTURAL GEOGRAPHY

Code:

UNIT-I Meaning –Scope and Content of Agricultural geography- Approaches.

UNIT-II Factors Influencing Agriculture: Physical, Cultural, Social and Economic Aspects. Origin and Diffusion of Crops.

UNIT-III Agricultural Systems-Whittlissey's classification-Agricultural Regions of the World.

UNIT-IV Spatial Crop Analysis: Cropping Indices: Intensity, Crop Concentration, Crop Diversification, Agricultural Productivity, and Crop Combination.

UNIT-V Spatial Methods in Agriculture: Agricultural Location- Theory and its Modification-Population and Food Supply-Markets.

REFERENCE BOOKS:

1. Majid Husian-Agricultural Geography.
2. W.M.Morgan and R.J.C.Muntan – Agricultural Geography.
3. A.Ahamed- Agricultural Geography.

Semester-VI

COURSE –VIII– GEOGRAPHY OF RESOURCES

Code-

**UNIT-I Resources: Meaning -Nature and Significance in resources-
Classification and types – Need for Conservation and Sustainable
Development.**

**UNIT-II Water Resources-Importance –Classification-Continent wise
Distribution and Utilization of water resources-Problems and Issues.**

**UNIT-III Biotic Resources-Major Forest types and Distribution –Live stock-
Fisheries-Major fishing grounds of the world.**

**UNIT-IV Mineral Resources-Classification and Distribution of major
Minerals: Iron and copper –Energy Resources-Coal, Petroleum,
Hydro Electric and Atomic power-Major industrial Zones of the
world.**

**UNIT-V Transportation and Trade –Different Modes of Transport- Trade-
Types, Factors affecting Trade-Multi lateral and Bilateral- Agreements
of trade –WTO-GATT.**

REFERENCE BOOKS:-

1. John.W.Alexander-Economic Geography.
2. Gohcheng Leong and Morgan-Economic and Human Geography.
3. Von Royan and Bergsten- Fundamentals of Economic Geography.
4. R.S.Thoman -Geography of Economic Activities.

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SEMESTER-VI

COURSE-IX – QUANTITATIVE METHODS IN GEOGRAPHY

Code:

UNIT-I Data Base:Classification of Data-Physical, Climatic, Economic Population, Industrial, Agricultural, Trade and Transport.-Sources of Data- Primary and Secondary–Geographical Sampling Methods.Point, Line and Area Sampling- Quantitative Revolution in Geography.

UNIT-II Processing of Data-Histogram-Frequency Polygon- Frequency Curve Measures of Central Tendency- Mean, Median and Mode.

UNIT-III Correlation Techniques-Spearman's Rank Correlation and Karl Pearson Co-efficient of Correlation-Geographical Applications.

UNIT-IV Regression Analysis-Types- Uses and Applications in Geography.

UNIT-V Hypothesis Testing-Methods-Uses of computers in Data Analysis- T-Test and F-test results and its Interpretations.

REFERENCE BOOKS:-

1. F.J.Monkhouse and H.R.Wilkinson – Maps and Diagrams.
2. Hammed and Magullah- Quantitative Techniques in Geography.
3. Gregory S. Longmans- Statistical Methods and the Geographers.
4. M. Yeates - An Introduction to Quantitative Analysis in Human Geography.

Semester-VI

Practical Core Course- III -Projections and Surveying

Code-

UNIT-I Projections: Construction of Equi-distant and Equal area, Cylindrical, Poly-conic and Zenithal Projections –Properties and uses.

UNIT-II Chain Survey-Triangulation-Open and Closed Traverse.

UNIT-III Prismatic Compass-Open and Closed Traverse-Recalculation of Bearings and Included Angles.

UNIT-IV Plane Table Survey-Open and Closed Traverse-Correction of Closing Error-Bowditch Method-Finding of Resection points –a)Trial and Error Method b) Tracing Paper Method (three points only).

UNIT-V Survey with Indian Clinometer and Abney level -Accessible and Inaccessible Methods- Dumpy Level-Collimation method, Calculation of Heights.

REFERENCE BOOKS

1. Singh.R.I- Elements of Practical Geography.
2. Monk house and Wilkinson- Maps and Diagrams.
3. Singh.R.L. -Map Work and Practical Geography.
4. Misra, R.P & Ramesh.A- Fundamentals of Cartography.
5. Kelley and George-Map projections.

Semester-VI

Practical Core Course-VI- Remote Sensing Techniques in Geography

Code-

UNIT-I Aerial Photographs:

- 1) Marginal Informations
- 2) Scale Determination
- 3) Height Determination

UNIT-II Satellite Images:

- 1) Marginal Informations
- 2) Appreciation of Single Band and True Colour Images
- 3) Appreciation of False Colour Composites.

UNIT-III Air Photo Interpretation (Stereoscopic Analysis):

- 1) Physical Features
- 2) Land uses
- 3) Settlements and Transportation.

UNIT-IV Satellite Image Interpretation:

- 1) Physical Features
- 2) Regional Landuse
- 3) Settlements and Transportation.

UNIT-V Comparative study of Map Information:

- 1) Air photo and Topographic Maps
- 2) Air photo and Satellite images.
- 3) Air photo, Satellite images and Topographic maps.

REFERENCE BOOKS:

1. Curran. P.J-Principles of Remote Sensing.
2. Sabins Jr.-Remote Sensing –Principles and Interpretation.
3. Lillisand &Kiefer- Remote Sensing and Image Interpretation.
4. Kumarasamy.K-(2006) Remote Sensing for Environmental Studies.

SEMESTER-V

ELECTIVE COURSE-I- BIO GEOGRAPHY

Code-

UNIT-I Bio-Geography: Definition, Scope and Significance -Basic
Ecological Principles-Bio-Energy Cycle in the Terrestrial Eco system -
Tropic Levels and Food Chain.

UNIT-II Evolution of Life on Earth:Origin of Fauna and Flora-Plants and
Animal evolution throughout the Geological Times-Distribution of
plant life on the earth-concepts of Biome, Ecotone and Community.

UNIT-III Bio-Diversity:Problems of Extinction of plant and animal life-
Habitat decay and need for Conservation- Process of Desertification
and its Consequences - Industrial Effluents and their effects on fresh
Water Biology.

UNIT-IV World Biomes: Major Biomes-Tropical Forest-Tropical
Grasslands-Temperate Grassland and Tropical Deserts.

UNIT-V Ecological and Environmental Managements: Study of
Ecological regions of Himalayas and the Western Ghats-Conservation
and Management-Major Global Environmental Problems-
International Co-operation.

REFERENCE BOOKS:-

1. Savindra Singh- Environmental Geography.
2. Robinson-H.Biogeography.
3. Nigel Pears- Basic Biogeography.
4. Newbegin.I. - Plant and Animal Geography.

Semester-V

Elective Course-II-Remote Sensing and GIS

Code-

UNIT-I Basics of Remote Sensing: Definition-scope and content-
Development of Aerial and Satellite remote sensing-International and
National Remote Sensing Centres-Uses.

UNIT-II Remote Sensing Systems: Electromagnetic Radiation-EMR
regions-Energy interaction in the atmosphere-Atmospheric windows-
energy interaction with earth surface features- Spectral reflection
curve –Platforms-Types of remote sensing.

UNIT-III Aerial Remote Sensing: Aerial cameras-Films and Filters-Types
of photos-Flight Planning-Elements of Photo interpretations.

UNIT-IV Satellite Remote Sensing: Types of Satellites-Orbital elements-
Resolutions: Spatial, Spectral, Temporal and Radiometric –LAND-
SAT-IRS SPOT and INSAT Satellite series.

UNIT-V Geographical Information Systems (GIS) Meaning- Developments-
Raster and Vector data-Data integration –Global positioning
System (GPS)-Advantages and Limitations of GIS and GPS.

REFERENCE BOOKS:

1. Curran. P.J- Principles of Remote Sensing.
2. Ashbins. J-Remote sensing –Principles and Interpretation.
3. Lillisand and Kiefer- Remote Sensing and Image Interpretation.

SEMESTER-VI
Elective Course -III –GEOGRAPHY OF INDIA

Code:

UNIT-I General Aspects: Location and Extent -Major Physiographic divisions-Drainage-Climate-Soils- Natural vegetation- Multi-purpose projects-DVC.

UNIT-II Agriculture-Importance -Distribution and production of major crops-Paddy, Wheat, Sugarcane, Tea, Cotton-Problems of Indian agriculture-Green Revolution.

UNIT-III Minerals and Power: Minerals Resources:- Iron, Manganese, Bauxite- Minerals and their distribution-Power Resources and Hydal Power, Coal, Petroleum, and Atomic power.

UNIT-IV Industries: - Distribution of Major Industries-Cotton Textile, Iron and Steel, Chemicals and Automobile- Major Industrial Regions.

UNIT-V Transport and Trade: Land, Water and Air – Foreign trade of India.

REFERENCE BOOKS:-

1. T.C sharma and O.Coutinho-Economic and commercial Geography of India.
2. Mamoria- Economic and Commercial Geography of India.
3. Gopal Singh – Geography of India.
4. R.N.Dubey and B.S Negi- Economic and Commercial Geography of India.
5. R.C.Tiwari-Geography of India.
6. Govt. of India Publications- Year Book.

Semester-II
Skill Based Courses-I

PHYSICAL GEOGRAPHY FOR COMPETITIVE EXAMINATIONS

Code-

UNIT-I General Geography: Nations and Capitals, Geographical locations
-Latitude, longitude and Time Zone, Solar System and Planets.

UNIT-II Landforms: Major relief features, Earth's External and Internal forces and Agents of Denudation-Features formed by them, Normal Cycle of Erosion.

UNIT-III Climatology: Atmosphere, Insolation – Temperature, Pressure – Wind – Humidity – Forms of Condensation and Precipitation – Types and Distribution of rainfall – Air mass – front, cyclones – Classification of Climate: Koppen's classifications.

UNIT-IV Oceanography: Land and Sea distribution – Bottom topography of Oceans – Temperature, Salinity, Currents, Tides, Coral reefs, Ocean Deposits and Resources.

UNIT-V Biogeography: Elements of biogeography – Environment, habitat, Plant and animal-Distribution Groupings-Distribution of forests and major Communities.

Reference Books:

1. Dayal.P- A Text book of Geomorphology.
2. Lal, D.S- Climatology.
3. Robinson, H- Biogeography.
4. Strahler. A.H. and Strahler.A.N. - Modern Physical Geography.
5. Thornbury.W.D- Principles of Geomorphology.
6. Worcester. P.G- A Textbook of Geomorphology.

Semester-III-

Skill Based Course –II-GEOGRAPHY OF TRAVEL AND TOURISM

Code-

UNIT-I-Tourism: Scope and Content-Geographical components of Tourism-Factors affecting the growth of Tourism-Types of Tourism-Religious Tourism –Recreational Tourism-Pleasure Tourism-Sporting Tourism.

UNIT-II- Tourism in India-Development-Tourism Departments-Corporations-Tourist Facilities and Services in India-Transport-Accommodation-Catering –Hospitality-Entertainment in Promoting Tourism.

UNIT-III-Tours and accommodation-Tours-Regional-National and International levels-Role of hotels Motels, Star hotels-Resorts and Guest houses in Development of Tourism.

UNIT-IV-Tourism and Travel Agencies-Functions –Tourism as a Trade –Role of Trade Fairs and Festivals-National and International Sports and Games as Promoters-Tourism in Tamil Nadu –Impact on Economy.

UNIT-V-Major Tourist Centres of India-Agra and Jaipur-Tourist locations: –Hill stations-Picnic Spots in South India: Geographical study of Ooty, Coimbatore, Kodaikanal, Yercaud, Bangalore and Mysore as Tourist locations.

REFERENCE BOOKS:-

1. Ratan Deep Singh- Tourism Today.
2. Bhatia-Tourism Development.
3. S.N.Singh-Geography of Tourism.
4. Manoj Das- India: A Tourist Paradise.

Semester-V
Skill Based Courses-III- Fundamentals of Map Reading

Code-

UNIT-I General: Latitudes and Longitudes-Greenwich Meridian Time- IST- Calculation of Time and Time zones-Location of Places-International Date Line.

UNIT-II Graticule: Radius of the reduced earth-Spacing of the parallels and Meridians-Grid and Grid Reference System-Grid North and True North.

UNIT-III Weather map-Synoptic Chart-Station model-Beaufort scale for Wind Velocity-Seasonal Interpretation-Cross Section of Cyclone-Track of Cyclone.

UNIT-IV Map Reading Instruments-Types of Map: Small, Medium and Large Scale Maps-Cadastral maps-Magnetic compass-Weather Reading and Recording Instruments-Pantograph-GPS-Uses.

UNIT-V Map Organizations in India-History of Land Survey in India-Survey of India-NATMO-ISRO Institutes-Survey and Land Records.

REFERENCE BOOKS:

1. Ramesh.A-Fundamentals of Cartography.
2. R.L.Singh-Practical Geographty.
3. Gopal Singh-Practical Geography.
4. Web Sites: NATA-survey of India-Land Records, Govt.of Tamil Nadu.
5. Pijushkanti Saha and Partha Basu-Advanced Practical Geography.

Semester-V
Skill Based Course-IV-CARTOGRAPHY

Code-

- 1.UNIT-I Cartography – Nature, Scope and Content of Cartography Arts and Science of Cartography-Cartography as system of communication- Maps – Classification and their uses- Growth, development and modern trends in Cartography.
- 2.UNIT-II Map Drawing and Measuring Techniques. Map Setting –The Earth and System of Co-ordinates – Base map – Compilation and Generalization – Symbolization – Types of Cartographic Symbols – Point, Line and Area- Uses – Qualitative and Quantitative data and generalization.
- 3.UNIT-III Mapping the relief features, elevation, contours, Hypsometric curves, Slopes, Shading and combined systems. The representation of Physical features – Hydrography – Coastline surface – characteristics – Composition, ice and vegetation etc. The Representation of artificial features with Point, Line and area symbols- International boundaries and boundaries in rivers –Representation of place names – Standardization of Place names.
- 4.UNIT-IV Map Design and Layout – General design problems – Principles of Cartographic design and design of map symbols – Format- Lettering – Lettering Methods, types and characteristic and use of map positioning of letters – Geographical names.
- 5.UNIT-V Map Reproduction – Process of Map Productions:Photographic systems – Multiple Reproduction Processes- Computer application in Cartography – Computer mapping- Remote Sensing and Cartography Use of air Photographs and Satellite images in Cartography.

REFERENCE BOOKS:

1. Misra R.P. and A.P. Ramesh – Fundamentals of Cartography.
2. Robinson-Elements of Cartography.
3. Keats J.S – Cartographic Design and Production.
4. Raiz -Principles of Cartography.

Semester-VI
Skill Based Course-V-Principles of Surveying

Code-

UNIT-I Surveying-Definition-Scope and Content-Types of Surveying-Area Measurement –Height Determination-Advantages of Survey.

UNIT-II Chain Survey-Accessibility –FMB-Methods of chain survey-Triangulation-Open and Closed Traverse-Plotting of chain survey and results.

UNIT-III Prismatic Compass-Parts of Prismatic Compass-Accessories-Traverse-Plotting of Prismatic Compass-Errors and its Corrections-Bow ditch's Method of Correction-Calculation of Bearings from included Angles.

UNIT-IV Plane Table –Equipments-Methods of Plane Table-Preparation work for the Plane Table Survey-Levelling and Orientating the Table-Resection Point –Trial and Error Method-Tracing Paper Method – Advantages and Disadvantages of Plane Table Survey.

UNIT-V Height Measurement:Determination of height-level surface-Leveling-Dumpy level –Parts of Dumpy level-Levelling Staff – Methods of dumpy level survey-Height measurement with Indian Clinometer and Abney Level.

Refence books:

1. Lekh Raj & Raghunandan Singh Map work and Practical Geography.
2. Jayachandran- Practical Geogeaphy.
3. Zamir alvi- A Text book of Practical Geography.
4. Pijushkanti Saha and Partha Basu-Advanced Practical Geography.

Semester-VI
Skill Based-Course-VI
SOCIAL GEOGRAPHY FOR COMPETITIVE EXAMINATIONS

Code-

UNIT-I Population—World Population distribution—factors affecting Population-Growth of Population-Theories: Malthus, Optimum, Demographic Transition-Migration-Settlement: Rural and Urban –Site and Situation-Classification-Urbanisation-Regional Studies – Concept –Types: Formal, Functional, Natural, Agricultural, Industrial and Cultural Regions of the world.

UNIT-II Cartography: Primary and Secondary source of data, Air photo and satellite Images, Maps: Compilation, Generalization-Mapping of Socio Economic data-Distribution maps.

UNIT-III Environmental Studies: Man and Environment relationships- Determinism-Possibilism-Ecosystem- Natural of Hazards-Impact of population – Pollution – Conservation.

UNIT-IV Resources of the World: Resource types –Agriculture: Distribution and Production of Paddy, Wheat, Tea and Coffee-Forest types –Distribution-Fisheries-Minerals: Iron ore-Power Resources: Coal-Petroleum, Thermal, Hydro, Nuclear- Industries: Cotton Textiles, Iron and Steel, Ship building,- Transport and Trade.

UNIT-V Geography of India: Location, Relief, Climate, Soil, Population, Urbanisation – Tamil Nadu – Relief-Climate-Crops-Minerals- Industries-Population and urbanization.

REFERENCE BOOKS:

1. Dayal, P., (1990) A Text book of Geomorphology.
2. Lal, D.S., (1996) Climatology.
3. Robinson, H. (1978) Biogeography.
4. Strahler.A.H. and Strahler.A.N. (2001) Modern Physical Geography.
5. Thornbury.W.D., (1954) Principles of Geomorphology.
6. Worcester, P.G., (1948) A Textbook of Geomorphology.

FOR OTHER MAJOR STUDENTS
SEMESTER-III
ELECTIVE COURSE-I-ECONOMIC AND COMMERCIAL GEOGRAPHY
OF INDIA

Code-

UNIT-I Introduction –Meaning and Nature-Human and Economic aspects of the world environment.Sectors:-Primary, secondary, Tertiary and Quaternary.

UNIT-II Resources:Types –Based on origin_Renewable and Non renewable-Conservation of natural resources-Problems of over exploitation of resources-Conventional and Non-Conventional energy resources.

UNIT-III Agriculture: Types based on cultivation, Farming and Management-Shifting, sedentary, Intensive, extensive, Commercial Mixed ,Dairy Farming,Horticulture,Floriculture and Viticulture and Sericulture,Co-operative and State farming.

UNIT-IV Major crops of the world:Food crops-Paddy,Wheat,Maize-Geographical requirements and distribution.Cash crops-Tea,Coffee and Rubber-Geographical requirements and distribution.

UNIT-V Major industries-World distribution-Transportation and Communication- International trade-NAFTA,EUROPEAN UNION,ASIA AND PACIFIC REGION and SAFTA.

Reference Books:

1. Goh Chen Leong and Gutlián C. Morgan-Human and Economic Geography.
2. T.C .Sharma and Continuo- Economic and Commercial geography Of India.
3. Strahler and Strahler- Geography & Man's Environment.
4. R.C.Tiwari-Geography of India.

SEMESTER-IV
ELECTIVE-II-PHYSICAL GEOGRAPHY FOR COMPETITIVE
EXAMINATIONS

Code-

UNIT-I General Geography: Nations and Capitals, Geographical locations
-Latitude, Longitude and Time Zone, Solar System and Planets.

UNIT-II Landforms: Major relief features, Earth's External and Internal
forces and Agents of Denudation-Features formed by them, Normal
Cycle of Erosion.

UNIT-III Climatology: Atmosphere, Insolation – Temperature, Pressure –
Wind – Humidity – Forms of Condensation and Precipitation – Types
and distribution of rainfall – Air mass – front, cyclones – classification
of Climate: Koppen's classifications.

UNIT-IV Oceanography: Land and Sea distribution – Bottom topography
of Oceans – Temperature, Salinity, Currents, Tides, Coral reefs,
Ocean Deposits and Resources.

UNIT-V Biogeography: Elements of biogeography – Environment, habitat,
Plant and animal-Distribution Groupings-Distribution of forests and
major Communities.

Reference Books:

1. Dayal.P- A Text book of Geomorphology.
2. Lal, D.S., (1996) Climatology.
3. Robinson, H. (1978) Biogeography.
4. Strahler. A.H., and Strahler.A.N., (2001) Modern Physical
Geography.
5. Thornbury.W.D., (1954) Principles of Geomorphology.
6. Worcester, P.G., (1948) A Textbook of Geomorphology.

Periyar University-Salem-11
B.Sc-Geography-List of Courses under CBCS
COURSE STRUCTURE UNDER CHOICE BASED CREDIT SYSTEM (CBCS)
STUDENTS ADMITTED FROM 2008-2009 ONWARDS.

LIST OF CORE COURSES-THEORY AND PRACTICALS

S.NO	NAME OF THE COURSE	COURSE CODE	SEMESTER
1	CLIMATOLOGY		I
2	OCEANOGRAPHY		II
3	GEOMORPHOLOGY		III
4	GEOGRAPHY OF TAMIL NADU		IV
5	HUMAN GEOGRAPHY		V
6	GEOGRAPHY OF POPULATION AND SETTLEMENTS		V
7	AGRICULTURAL GEOGRAPHY		VI
8	GEOGRAPHY OF RESOURCES		VI
9	QUANTITATIVE METHODS IN GEOGRAPHY		VI
10	<i>PRACTICAL-I (MAP AND SCALES)</i>		II
11	<i>PRACTICAL-II- (MAP INTERPRETATION AND DATA REPRESENTATION)</i>		IV
12	<i>PRACTICAL-III- (PROJECTIONS AND SURVEYING)</i>		VI
13	<i>PRACTICAL-IV-(REMOTE SENSING TECHNIQUES IN GEOGRAPHY)</i>		VI

LIST OF SKILL BASED ELECTIVE COURSES (SBEC)

S.NO	NAME OF THE COURSE	COURSE CODE	SEMESTER
1	PHYSICAL GEOGRAPHY FOR COMPETITIVE EXAMINATIONS		II
2	GEOGRAPHY OF TRAVEL AND TOURISM		III
3	FUNDAMENTALS OF MAP READING		V
4	CARTOGRAPHY		V
5	PRINCIPLES OF SURVEYING		VI
6	SOCIAL GEOGRAPHY FOR COMPETITIVE EXAMINATIONS		VI

LIST OF ELECTIVE COURSES (EC)

S.NO	NAME OF THE COURSE	COURSE CODE	SEMESTER
1	BIO-GEOGRAPHY		V
2	REMOTE SENSING AND GIS		VI
3	GEOGRAPHY OF INDIA		VI

LIST OF NON-MAJOR ELECTIVE COURSES (NMEC)

S.NO	NAME OF THE COURSE	COURSE CODE	SEMESTER
1	ECONOMIC AND COMMERCIAL GEOGRAPHY		III
2	PHYSICAL GEOGRAPHY FOR COMPETITIVE EXAMINATIONS		IV

COMMON COURSES

S.NO	NAME OF THE COURSE	COURSE CODE	SEMESTER
1	VALUE BASED EDUCATION		I
2	EXTENSION ACTIVITIES		VI

COMPULSORY COURSE

S.NO	NAME OF THE COURSE	COURSE CODE	SEMESTER
1	ENVIRONMENTAL STUDIES		II

B.Sc–GEOGRAPHY –COURSE STRUCTURE UNDER CBCS PATTERN
(For the candidate admitted from the Academic year 2008- 2009 onwards)
SEMESTER-I

PART	TITLE OF THE COURSE	Course	Instr.Hour s/Week	Credit s	Exam Hours	MARKS		TOTAL
						CIA	EXTE	
I	LANGUAGE COURSE TAMIL-I	1	6	3	3	25	75	100
II	LANGUAGE COURSE- ENGLISH-I	1	6	3	3	25	75	100
III	CORE—CLIMATOLOGY-I	1	5	5	3	25	75	100
	CORE-PRACTICALS-(MAPS AND SCALES)-I * *	-	3	-	-	-	-	-
	ALLIED –APPLIED STATISTICS -I	1	4	3	3	25	75	100
	ALLIED- PRACTICALS-I * *	-	4	-	-	-	-	-
IV	VALUE BASED EDUCATION (Common Course)	1	2	2	3	25	75	100
	TOTAL	5	30	16	15	125	375	500

SEMESTER-II

PART	TITLE OF THE COURSE	COURSE	INSTU OURS/ WEEK	CREDIT S	EXAM HOUR	MARKS		TOTAL
						CIA	EXTE	
I	LANGUAGE COURSE TAMIL-II	1	6	3	3	25	75	100
II	LANGUAGE COURSE- ENGLISH-II	1	6	3	3	25	75	100
III	CORE-OCEANOGRAPHY-II	1	5	5	3	25	75	100
	CORE- PRACTICAL-(Maps and Scales)-I	1	3	3	3	25	75	100
	ALLIED – APPLIED STATISTICS-II	1	4	4	3	25	75	100
	ALLIED -PRACTICAL -I	1	3	3	3	25	75	100
	<i>PHYSICAL GEOGRAPHY FOR COMPETITIVE EXAMINATIONS -SBEC-I</i>	1	2	2	3	25	75	100
IV	ENVIRONMENTAL STUDIES	1	1	2	3	25	75	100
	TOTAL	8	30	25	24	200	600	800

SEMESTER-III

PART	TITLE OF THE COURSE	COURSE	INSTU HOURS/ WEEK	CREDITS	EXAM HOUR	MARKS		TOTAL
						CIA	EXTE	
I	LANGUAGE COURSE TAMIL-III	1	6	3	3	25	75	100
II	LANGUAGE COURSE-ENGLISH-III	1	6	3	3	25	75	100
III	CORE- GEOMORPHOLOGY-III	1	5	5	3	25	75	100
	CORE- PRACTICAL-II (MAP INTERPRETATION AND DATA REPRESENTATION) -II*	-	2	-	-	-	-	-
	ALLIED BOTANY-I	1	4	3	3	25	75	100
	ALLIED PRACTICAL **	-	3	-	-	-	-	-
IV	<i>GEOGRAPHY OF TRAVEL AND TOURISM-SBEC-II</i>	1	2	2	3	25	75	100
	NMEC-I	1	2	2	3	25	75	100
TOTAL		6	30	18	18	150	450	600

SEMESTER-IV

PART	TITLE OF THE COURSE	COURSE	INSTU HOURS/ WEEK	CREDITS	EXAM HOUR	MARKS		TOTAL
						CIA	EXTE	
I	LANGUAGE COURSE TAMIL-IV	1	6	3	3	25	75	100
II	LANGUAGE COURSE-ENGLISH-IV	1	6	3	3	25	75	100
III	CORE-GEOGRAPH OF TAMIL NADU-IV	1	5	5	3	25	75	100
	CORE- PRACTICAL-II (MAP INTERPRETTION AND DATA REPRESENTATION))—II	1	2	4	3	25	75	100
	ALLIED BOTANY-II	1	5	4	3	25	75	100
	ALLIED PRACTICAL-II	1	4	3	3	25	75	100
IV	NMEC-II	1	2	2	3	25	75	100
TOTAL		7	30	24	21	175	525	700

SEMESTER-V

PART	TITLE OF THE COURSE	COURSE	INSTU HOURS/ WEEK	CREDITS	EXAM HOUR	MARKS		TOTAL
						CIA	EXTE	
III	CORE- HUMAN GEOGRAPHY-V	1	4	4	3	25	75	100
	CORE-GEOGRAPHY OF POPULATION AND SETTLEMENTS-VI	1	4	4	3	25	75	100
	CORE-BIO-GEOGRAPHY-EC-I	1	4	4	3	25	75	100
	REMOTE SENSING AND GIS-EC-II	1 -	4	-4	-3	-25	-75	100-
	CORE-PRACTICAL-(PROJECTIONS AND SURVEYING)-IV**	-	3	-	-	-	-	-
	CORE-PRACTICAL-REMOTE SENSING TECHNIQUES IN GEOGRAPHY)-IV**	-	3					
IV	FUNDAMENTALS OF MAP READING- SBEC-III	1	4	4	3	25	75	100
	CARTOGRAPHY-SBEC-IV	1	4	4	3	25	75	100
	TOTAL	6	30	24	18	150	450	600

SEMESTER-VI

Part	TITLE OF THE COURSE	COURSE	INSTU HOURS/ WEEK	CREDITS	EXAM HOUR	MARKS		TOTAL
						CIA	EXTE	
III	CORE-AGRICULTURAL GEOGRAPHY	1	4	4	3	25	75	100
	CORE-GEOGRAPHY OF RESOURCES	1	4	4	3	25	75	100
	CORE-QUANTITATIVE METHODS IN GEOGRAPHY	1	4	4	3	25	75	100
	CORE-GEOGRAPHY OF INDIA- EC-III	1	4	4	3	25	75	100
	CORE- PRACTICAL (PROJECTIONS AND SURVEYING)- III	1	3	4	3	25	75	100
	CORE- PRACTICAL- (REMOTE SENSING TECHNIQUES IN GEOGRAPHY- IV	1	3	4	3	25	75	100
IV	PRINCIPALS OF SURVEYING – SBEC-V	1	4	4	3	25	75	100
	SOCIAL GEOGRAPHY FOR COMPET- ITVE EXAMINATIONS- SBEC-VI	1	4	4	3	25	75	100
	EXTENSION ACTIVITIES	1	-	-	-	-	-	-
	TOTAL	8	30	32	24	200	600	800
	OVER ALL TOTAL	41	180	140 *		1000	3000	4000

** Examinations only at the even semesters

* Extension Activities –One Course and One Credit = 139+1= 140 Credits

QUESTION PATTERN

CORE, SKILL BASED, ELECTIVE and NON-MAJOR ELECTIVE
AND ALLIED COURSES.

Max. Marks= 75

Internal Marks-25

Total -100 Marks

PART-A (10X2= 20 Marks)

Two questions from each section.

ANSWER ALL THE QUESTIONS

Answer should not exceed 50 words

Part-B =(5x5=25 marks).

Two questions from each section with **INTERNAL** (a) or (b) choice.

Answer ALL the questions

Answer should not exceed 300 words.

Part-C = (3X10=30M Marks).

One Question from Each section.

Answer ANY THREE questions Out of FIVE questions.

Answer should not exceed 1200 words.

QUESTION PATTERN
MAJOR CORSE PRACTICALS

For Record Submission-	10
For Internal	15

Total Marks	25 Marks

For University Examination --- 75 Marks

One Question from Each Section

Each question carries 15 Marks (5x15= 75 Marks)

Allied –Geography for HISTORT Major B.A(First Year)

Semester-I

Allied course-I-Geography of India

UNIT-I India: Location-Physiographic units and its significances-Climate-Rainfall Variation and Distribution-Climatic Regions-Soil: Types and Distribution-Erosion and Conservation-Natural Vegetations-Forest distribution and its Products-Water Resources-River Irrigation: Types-Distribution-Multipurpose Projects-DVC.

UNIT-II Agriculture-Importance of Agriculture-Distribution and Production of the following crops; a)Paddy b)Wheat c)Cotton d)Jute e)Tea f)coffee -Problems of Agriculture-Green revolution.

UNIT-III Mineral Resources-distribution, Production and Trade of the following Minerals: Iron, Manganese, Mica and bauxite-Power resources: Coal, Petroleum and natural Gas-Atomic minerals-Power Distribution and Production.

UNIT-IV Industries: Locational factors-Major Industries: Iron and Steel, Steel, Shipbuilding, Chemicals, Paper, Cement and sugarcane Industries.

UNIT-V Human Resources: Population; Growth and Distribution-Rural and Urban Population-Migration; Types-Causes and Consequences.

Reference Books:-

1. T.C Sharma and O.Coutinho-Economic and commercial Geography of India.
2. Mamoria- Economic and Commercial Geography of India.
3. Gopal Singh – Geography of India.
4. R.N Dubey and B.S Negi- Economic and Commercial Geography of India.
5. Govt. of India Publications- Year Book, Ministry of Information and Broadcasting Division, New Delhi.
6. R.C.Tiwari-Geography of India.

SEMESTER-II

Paper-IV- GEOGRAPHY OF TAMILNADU

Code-

Unit-I: Location: Physiographic Units-Climate-Seasons-Rainfall variation and Distribution-Climatic Variations. Soil Types and Distribution-Forest Types and Distribution.

Unit-II: Agriculture: Importance of Agriculture –Distribution of the following crops.)Paddy b) Wheat c) Cotton d) Sugar cane d) Tea e) Coffee.

Unit-III: Minerals: Distribution, Production of the following minerals.

a) Iron b) Bauxite c) Lime Stone.

b) Power resources: - a) Coal b) Natural Gas and Petroleum.

c) Industries: - a) Cotton b) Sugar c) Cement d) Automobiles.

Unit-IV: population: Growth and Distribution- Rural and Urban Population-Density of Population-Literacy Rate-Birth and Death Rate.

Unit-V: Transportation: Road, Railways and Air ways-Important ports.

REFERENCE BOOKS:-

1.Indian Geographical Society-This is Tami Nadu .

2.Kumarasmy.K-Ggography of Tamil Nadu.

3.Ramesh.a and Tiwari.P.S-Basic Resource Atlas of Tamil Nadu.

4. R.C.Tiwari-Geography of India.
