PERIYAR UNIVERSITY

PERIYAR PALKALAI NAGAR

SALEM - 11

DEGREE OF BACHELOR OF SCIENCE

CHOICE BASED CREDIT SYSTEM (CBCS)

SYLLABUS FOR B.SC. GEOGRAPHY

FOR THE STUDENTS ADMITTED FROM THE

ACADEMIC YEAR 2017–2018 ONWARDS

BOARD OF STUDIES

1.	**Thiru. P. Sundarasolan** Associate Professor & Head Department of Geography A.A.Govt. Arts College Namakkal – 2	Chairman
2.	**Dr. C. Manimozhi** Associate Professor Department of Geography Govt. Arts College (Auto) Salem – 7	Member
3.	**Dr. K. Panneerselvan** Associate Professor Department of Geography A.A.Govt. Arts College Namakkal -2	Member
4.	**Thiru. A. Raja** Associate Professor Department of Geography Govt. Arts College (Auto) Salem – 7	Member
5.	**Dr. K. Anbarasu** Assistant Professor Dept. of Geology Periyar University Salem – 11	University Nominee
6.	**Dr. V. Madha Suresh** Professor and Head i/c Centre for Hazards and Disaster Studies, University of Madras, Chepauk, Chennai - 5	Member External
7.	**Thiru. R. Jegankumar** Assistant Professor and Head Department of Geography Bharathidasan University Tiruchirappalli – 24	Member External
8.	**Thiru. G. Senthil Kumar** Senior Geologist Geological Survey of India State Unit Karnataka, Bangalore – 78	Industrial Personal
9.	**Dr. S. Arivazhagan** Assistant Professor Centre for Applied Geology Gandhigram Rural University Dindigul – 2	Alumni

Periyar University – Salem-11

B.Sc., GEOGRAPHY - LIST OF COURSES UNDER **CBCS**
COURSE STRUCTURE UNDER CHOICE BASED CREDIT SYSTEM (CBCS)
STUDENTS ADMITTED FROM 2017-2018 ONWARDS

LIST OF CORE COURSES - THEORY AND PRACTICALS

SL. NO.	NAME OF THE COURSE	COURSE CODE	SEMESTER
1.	Climatology	17UGG01	I
2.	Oceanography	17UGG02	II
3.	Geomorphology	17UGG03	III
4.	Regional Geography of Tamil Nadu	17UGG04	IV
5.	Human Geography	17UGG05	V
6.	Natural Regions of the World	17UGG06	V
7.	Geography of Population and Settlement	17UGG07	VI
8.	Geography of Resources	17UGG08	VI
9.	Regional Geography of Asia	17UGG09	VI
10.	Practical - I (Representation of Relief and Climatic Data)	17UGGP01	II
11.	Practical - II (Map Interpretation and Socio-Economic Data Representation)	17UGGP02	IV
12.	Practical - III (Projections and Surveying)	17UGGP03	VI
13.	Practical - IV (Remote Sensing Techniques in Geography)	17UGGP04	VI

LIST OF SKILL BASED ELECTIVE COURSES (SBEC)

SL. NO.	NAME OF THE COURSE	COURSE CODE	SEMESTER
1.	Fundamentals of Physical Geography	17UGGS01	II
2.	Geography of Travel and Tourism	17UGGS02	III
3.	Physical Geography of India	17UGGS03	V
4.	Fundamentals of Cartography	17UGGS04	V
5.	Principles of Surveying	17UGGS05	VI
6.	An Introduction to Social Geography	17UGGS06	VI

LIST OF ELECTIVE COURSES (EC)

SL. NO.	NAME OF THE COURSE	COURSE CODE	SEMESTER
1.	Bio-geography	17UGGE01	V
2.	Remote Sensing and GIS	17UGGE02	V
3.	Economic Geography of India	17UGGE03	VI

LIST OF NON-MAJOR ELECTIVE COURSES (NMEC)

SL. NO.	NAME OF THE COURSE	COURSE CODE	SEMESTER
1.	Geography of India	17UGGN01	III
2.	Geography of Tamil Nadu	17UGGN02	IV

COMMON COURSES

SL. NO.	NAME OF THE COURSE	COURSE CODE	SEMESTER
1.	Value Based Education	17UVE01	I
2.	Extension Activities	17UEX01	VI

COMPULSARY COURSE

SL. NO.	NAME OF THE COURSE	COURSE CODE	SEMESTER
1.	Environment Studies	17UES01	II

COURSE STRUCTURE

FROM THE ACADEMIC YEAR 2012-2013 ONWARDS

Part	Course	No. of Hours / week	Exam Hours	Credit	Marks		
					Int.	Ext.	Total
Semester I							
I	Tamil or any other Language Paper -I	6	3	3	25	75	100
II	English Paper -I	6	3	3	25	75	100
III	Core - Climatology	5	3	5	25	75	100
III	Allied- Statistics I	4	3	3	25	75	100
IV	Value Based Education	2	3	3	---	---	---
Semester II							
I	Tamil or any other Language Paper -I I	6	3	3	25	75	100
II	English Paper -I I	6	3	3	25	75	100
III	Core - Oceanography	5	3	5	25	75	100
III	SBEC - Fundamentals of Physical Geography	2	3	2	25	75	100
III	Core Practical - I (Representation of Relief and Climatic Data)	3	3	3	40	60	100
III	Allied- Statistics - II	4	3	3	25	75	100
III	Allied Practical - Statistics	3	3	3	40	60	100
III	Environmental Studies	1	3	2	25	75	100
Semester III							
I	Tamil or any other Language Paper -I II	6	3	3	25	75	100
II	English Paper -III	6	3	3	25	75	100
III	Core - Geomorphology	4	3	5	25	75	100
III	SBEC - Geography of Travel and Tourism	2	3	2	25	75	100
III	Allied-Botany-I	4	3	3	25	75	100
III	NMEC - Geography of India	2	3	2	25	75	100

Part	Course	No. of Hours / week	Exam Hours	Credit	Marks		
					Int.	Ext.	Total
Semester IV							
I	Tamil or any other Language Paper -IV	6	3	3	25	75	100
II	English Paper -IV	6	3	3	25	75	100
III	Core - Regional Geography of Tamil Nadu	4	3	5	25	75	100
III	Core - Practical-II (Map Interpretation and Socio-Economic Data Representation)	3	3	4	40	60	100
III	Allied-Botany-II	4	3	4	25	75	100
III	Allied Practical -I Botany	3	3	3	40	60	100
III	NMEC - Geography of Tamil Nadu	2	3	2	25	75	100
Semester V							
III	Core - Human Geography	5	3	5	25	75	100
III	Core - Natural Regions of the World	5	3	5	25	75	100
III	SBEC - Physical Geography of India	2	3	2	25	75	100
III	SBEC – Fundamentals of Cartography	2	3	2	25	75	100
III	Elective - Bio-Geography	5	3	5	25	75	100
III	Elective - Remote Sensing and GIS	5	3	5	25	75	100
Semester VI							
III	Core - Geography of Population and Settlement	5	3	5	25	75	100
III	Core - Geography of Resources	5	3	5	25	75	100
III	Core - Regional Geography of Asia	5	3	5	25	75	100
III	Core - Practical III (Projections and Surveying)	3	3	4	60	40	100

Part	Course	No. of Hours / week	Exam Hours	Credit	Marks		
					Int.	Ext.	Total
III	Core - Practical IV (Remote Sensing Techniques in Geography	3	3	4	60	40	100
III	SBEC - Principles of Surveying	2	3	2	25	75	100
III	SBEC - An Introduction to Social Geography	2	3	2	25	75	100
III	Elective - Economic Geography of India	5	3	5	25	75	100
IV	Extension Activities	---	---	1	---	---	---
Total				140			

QUESTION PATTERN

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

Max Marks = 75
Internal Marks = 25
Total = 100

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=30 MARKS)
One question from each section
Answer ANY THREE questions out of FIVE questions
Answer should not exceed 1200 words

QUESTION PATTERN
MAJOR COURSE PRACTICALS

Internal Marks = 40
University Examination + Record = 60
Total = 100

One Question from each section
Each question carries 10 Marks (5X10=50 Marks)
For Record Submission = 10 Marks
Total Marks (50+10) = 60

Semester I

CLIMATOLOGY

Paper Code: 17UGG01

Unit I: Definition and Significances of Climatology - Rotation and Revolution of the Earth, Solstice, Equinox and Seasons, Elements of Weather and Climate, Composition and Structure of the Atmosphere, Isolation: factors affecting Isolation, Global energy budget, Horizontal and Vertical Distribution Inversion of Temperature and factors affecting them.

Unit II: Atmospheric Pressure: Diurnal and Seasonal Variations – Vertical and Horizontal distribution and factors affecting – Pressure Gradient – Coriolis force and Deflection. Winds: Causes and Types - Jet stream, planetary winds, Monsoon and Local winds.

Unit III: Atmospheric moisture and Precipitation: Humidity types - Condensation – Cloud types – Precipitation and Rainfall: Types and measurements.

Unit IV: Air Masses and Fronts: types, classification and properties – Atmospheric Disturbances: Tropical, Temperate Cyclones, Thunderstorms and Tornadoes – Origin, Development and associated weather conditions.

Unit V: Climatic Classification: Need and Basis of Climatic Classification – Koppen's Climatic Classification – Weather forecasting: Observation, Types and Uses.

Reference Books:

1. Critchfield, H. (1975). *General Climatology*. Prentice-Hall, New York.
2. Das, P.K. (1968). *The Monsoons*. National Book Trust, New Delhi.
3. Mather, J.R. (1974). *Climatology: Fundamentals and Applications*. McGraw-Hill, New York.
4. Patterson, S. (1969). *Introduction of Meteorology*. McGraw-Hill Book Co., London.
5. Stringer, E.T. (1982). *Foundation of Climatology*. Surjeet Publications, New Delhi.
6. Trewartha, G.T. (1968). *An Introduction to Climate (4th Edition).* McGraw-Hill Book Kogakushu Ltd., New York.
7. Kumaraswamy, S.V. (2014). Geography of Tamil Nadu (Tamil Edition), Sakthi Abirami Pathipagam, Coimbatore.

Semester II

OCEANOGRAPHY

Paper Code: 17UGG02

Unit I: Oceanography: Scope, Content, Significance, Distribution of Land and Sea – Hypsometric Curve, Surface Configuration of the Ocean Floor: Continental Shelf, Continental Slope, Deep Sea Plain, Oceanic Deeps and Submarine Canyons.

Unit II: Relief Features of the Major Oceans: Atlantic, Pacific and Indian Ocean – Horizontal and Vertical Distribution of Seawater Temperature, Salinity: Factors Affecting Salinity and Distribution.

Unit III: Ocean Water Circulation: Factors Influencing Ocean Circulation – General Circulation of Ocean Currents, Currents of the Atlantic, Pacific and Indian Ocean, Waves and Tides: Definition and Types, Tsunamis: Origin and Effects.

Unit IV: Marine Deposits: Classification and Distribution – Coral Reefs types - Conditions for the Growth.

Unit V: Marine Resources: Types – Distribution and Uses – Tidal Energy – Role of National Institute of Oceanography in India.

Reference Books:

1. Anikouchine, W.A. and Sternberg, R.W. (1973). *The World Oceans - An Introduction to Oceanography*. Prentice-Hall, Englewood Cliffs, New Jersey.
2. Garrison, T. (1998). *Oceanography: An Invitation to Marine Science (3rd Edition),* Wadsworth Publishing Company, Belmont, California.
3. Gerald, S. (1980). *General Oceanography: An Introduction*. John Wiley & Sons, New York.
4. King, C.A.M. (1972). *Beaches and Coasts*. Edward Arnold, London.
5. King, C.A.M. (1975). *Oceanography for Geographers*. Edward Arnold, London.
6. Ramasamy, G. (1970). *Oceanography (Tamil Edition)*. Tamil Nadu Text Book Society, Chennai.
7. Sharma, R.C. and Vatal, M. (1970). *Oceanography for Geographers*. Chaitanya Publishing House, Allahabad.

Semester III

GEOMORPHOLOGY

Paper Code: 17UGG03

Unit I: Meaning – scope - content and significance of Geomorphology –The Universe – Solar system – Sun and Planets – Origin of the earth – Hypothesis of Kant, Laplace and James jeans. Internal structure of the earth – Rock Types: Igneous, sedimentary and metamorphic.

Unit II: Internal structure of the earth – Rock Types: Igneous, sedimentary and metamorphic. Geomorphic Processes: Internal and external processes – Faults, Folds and Cracks, Volcanism and Earthquakes: types and distribution.

Unit III: External processes: Weathering: Physical, Chemical and Biological. Mass wasting: Soil creep, landslide, rock fall, rock slip and mud flow.

Unit IV: Landforms produced due to erosion and deposition with reference to: a. Running water, and b. Underground water.

Unit V: Landforms produced due to erosion and deposition with reference to: a) Glaciers, b) Winds, and c) Waves.

Reference Books:

1. Dayal, P.A. (1996). *Text book of Geomorphology*. Shukla Book Depot, Patna.
2. Kale, V.S. and Gupta, A. (2001). *Elements of Geomorphology*. Oxford University Press, Calcutta.
3. Monkhouse, F.J. (1974). *Principles of Physical Geography*. Hodder and Stoughton, London.
4. Pitty, A.F. (1974). *Introduction to Geomorphology*. Methuen, London.
5. Singh, S., (1998): *Geomorphology*, Prayag Pustakalay, Allahabad.
6. Sparks, B.W. (1960). *Geomorphology*. Longmans, London.
7. Strahler, A.N. and Strahler, A.H. (1987). *Modern Physical Geography (3rd Edition)*. John Wiley and Sons, New York.
8. Sivamoorthy, A. (1964). *Geomorphology* (Tamil Edition). Tamil Nadu Text Book Society, Chennai.

Semester IV

REGIONAL GEOGRAPHY OF TAMIL NADU

Paper Code: 17UGG04

Unit I: Location and Extent: Administrative units – Major relief features – Major rivers – Climate: temperature, Seasonal and Annual rainfall – distribution, Soil: types and their distribution.

Unit II: Forest, Livestock and Fisheries: Types and distribution, forest products, Livestock: cattle, sheep, dairying and fisheries-inland and deep-sea fishing.

Unit III: Irrigation and Agriculture Resources: types and distribution – canal, tank and well irrigation, Agriculture: distribution and production of rice, cotton, sugarcane, and rain fed crops, oil seeds, tea and coffee.

Unit IV: Mineral and Industrial Resources: General distribution and production. Power resources: Hydel, thermal, atomic and wind power, Industries: distribution and production of – cement, sugar, cotton, automobile and paper.

Unit V: Transport: Development and distribution of roads, railways, air and sea transportation - Important ports, Population – growth and distribution of rural and urban population.

Reference Books:

1. Kumaraswamy, S.V. (2014). Geography of Tamil Nadu (Tamil Edition), Sakthi Abirami Pathipagam, Coimbatore.
2. SHBoTN (2004). *Statistical Hand Book of Tamil Nadu*. Department of Economics and Statistics, Government of Tamil Nadu, Chennai.
3. TNEA (2014). *Tamil Nadu – An Economic Appraisal 2011-12 to 2013-14*. Department of Evaluation and Applied Research, Chennai.
4. SCRoTN (2004). *Season and Crop Report of Tamil Nadu for the Agricultural Year 2003-2004*. Department of Economics and Statistics, Chennai.

Semester V

HUMAN GEOGRAPHY

Paper Code: 17UGG05

Unit I: Basics: Scope and Content of Human Geography – Interrelationship between Man and Environment – Concepts – Determinism, Possibilism, Neo-determinism and Probabilism.

Unit II: Race: Major Races – Caucasoid, Mongoloid and Negroid; Distribution, Racial Conflicts and Racial Prejudice.

Unit III: Religion: Distribution of World Religion: Hinduism, Christianity, Islam, Buddhism and Judaism.

Unit IV: Languages: Major World Languages and their Distribution – Geographical Factors – Significances.

Unit V: Cultural Diffusion: Meaning and Elements – Types of Diffusion – Cultural Hearths: Major Cultural Hearths of the World – Cultural Realms: Meaning and Bases of Delimitation Major Cultural Worlds.

Reference Books:

1. Husian, M. (2011). *Human Geography*. Rawat Publication, New Delhi.
2. Trewarta, G.T. (1969). *A Geography of Population: World Patterns*. John Wiley & Sons, New York.
3. Leong, G.C. and Morgan, G.C. (1982*). Human and Economic Geography*. Oxford University Press, London.
4. Chandna, R.C. (2010). *Population Geography*, Kalyani Publisher, New Delhi.
5. Hassan, M.I. (2005). *Population Geography*, Rawat Publications, Jaipur.
6. Daniel, P.A. and Hopkinson, M.F. (1989). *The Geography of Settlement*, Oliver & Boyd, London.

Semester V

NATURAL REGIONS OF THE WORLD

Paper Code: 17UGG06

Unit I: Definition – Natural Regions of the World – Equatorial Region: Situation and extent, Climate, Natural Vegetation, Animal life, Human life and Economic Development.

Unit II: Tropical Region: Tropical Monsoon Region – Tropical Savanna – Climate – Soil – Vegetation – Life in Tropics – Economic Activity.

Unit III: Arid Region: World Deserts – Hot Deserts – Cold Deserts – Climate – Soil – Vegetation – Life in Deserts – Economic Activity.

Unit IV: Temperate Region: World Grasslands – (Prairies – Pampas – Downs – Valdes – Canterbury) Climate – Soils – Life in Temperate Regions – Economic activity.

Unit V: Tundra Region: Arctic Region – Climate – Vegetation – Life in Tundra Region – Economic Activity.

Reference Books:

1. Heintzelman, O.H. and Highsmith (Jr.), R.M. (1973). *World Regional Geography*, Prentice Hall Ltd., New Delhi.
2. Hussain, M. (2004). *World Geography*. Rawat Publication, New Delhi.
3. Robinson, H. (1977). *Monsoon Asia*. McDonald and Evans Ltd., Plymouth.
4. Stamp, L.D. (1967). *Asia: A Regional and Economic Geography*. B.I. Publication Ltd., New Delhi.
5. Tirtha, R. (2005). *Geography of Asia*. Rawat Publication, New Delhi.
6. Wheeler (Jr.), J., Kostabade, R. and Thoman, R.S. (1969). *Regional Geography of the World*. Holt Rinehart and Winston, New York.

Semester VI

GEOGRAPHY OF POPULATION AND SETTLEMENTS

Paper Code: 17UGG07

Unit I: Population**:** As a Resource and Constraints to Development – Factors affecting Distribution and Density of Population – World distribution of Population.

Unit II: Migration**:** Meaning and Causes of Migration - Consequences of Migrations. Types of Migration: National, International, Voluntary and Forced Migrations.

Unit III: Settlements**:** Definition, Site and Situations of Rural Settlements, Factors Influencing Settlement Patterns, Classification of Settlements: Rural and Urban.

Unit IV: Urban and Urbanization: Meaning – Classification of Towns and Cities – Site, Situation and Functions – Urban Hierarchy and Hinterland – Pattern of Urbanizations in India.

Unit V: Urban Morphology: Theories relating to the morphology of town - a) Concentric zone theory, b) Circle and Sector theory and c) Multiple Nuclei theory – Morphology of an Indian city: Allahabad.

Reference Books:

1. Trewartha, G.T. (1969). *A Geography of Population: World Patterns*. John Wiley & Sons Inc, New York.
2. Clarke, J.I. (1984). *Geography and Population: Approaches and Applications*. Pergamon Press, London.
3. Bogue, D.J. (1969). *Principle of Demography*. John Wiley & Sons Inc, New York.
4. Cole, J.P. and King, C.A.M. (1968). *Quantitative Geography: Techniques and Theories in Geography*. John Wiley & Sons Inc, New York.
5. Mayer, H. and Kohn, C. (1959). *Readings in Urban Geography*. University of Chicago Press, Chicago.
6. Singh, R.Y. (2002). *Geography of Settlements*. Rawat Publication, New Delhi.
7. Maurya, S.D. (2012). *Human Geography*. Prayag Publications, Allahabad.

Semester VI

GEOGRAPHY OF RESOURCES

Paper Code: 17UGG08

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 – Livestock – Fisheries – Major Fishing Grounds of the World.

Unit IV: Minerals 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 – Multilateral and Bilateral – Agreements of Trade – WTO – GATT.

Reference Books:

1. Alexander, J.W. (1964). *Economic Geography*. John Wiley & Sons Inc, New York.
2. Leong, C.H. and Morgan, G.C. (1982). *Economic and Human Geography (2nd Edition)*. Oxford University Press, Kuala Lumpur.
3. Bengtson, N.A. and Royen, W.V. (1935). *Fundamentals of Economic Geography*. Prentice Hall Inc, New York.
4. Thomas, R.S. (1962). *The Geography of Economic Activities*. McGraw Hill, New York.
5. Mather, A.S. and Chapman, K. (1995). *Environmental Resources.* John Wiley and Sons, New York.

Semester VI

REGIONAL GEOGRAPHY OF ASIA

Paper Code: 17UGG09

Unit I: Significance of Geographical Location – Physiography – Climate – Drainage systems.

Unit II: Soil Types and Classification – Agricultural Production – Rice and Wheat – Rubber, Tea and coffee, Sugar cane and Jute.

Unit III: Mineral and Energy Resources – Iron ore, Manganese, Tin, Bauxite, Coal, Petroleum and Natural Gas.

Unit IV: Industrial Production and Distribution – Iron and Steel, Cotton and textile, Sugarcane and Automobile.

Unit V: Population – Transport and Trade and Commerce.

Reference Books:

1. Leong, C.H. and Morgan, G.C. (1982). *Economic and Human Geography (2nd Edition)*. Oxford University Press, Kuala Lumpur.
2. Tirtha, R. (2001). *Geography of Asia*. Rawat Publications, New Delhi.
3. Manku, D.S. (2010). *A Regional Geography of the World*. Kalyani Publishers, New Delhi
4. Stamp, L.D. (1969). *Asia: A Regional and Economic Geography*. Metheun Publications, London.
5. Tiwari, S.K. (1975). *Geography of Asia*. Kedarnath and Ramnath, Meerut.
6. Shafi, M. (2000). *Geography of South Asia*. MacMillan and Co., Kolkata.

Semester II

Core Course - Practical - I
REPRESENTATION OF RELIEF AND CLIMATIC DATA

Paper Code: 17UGGP01

Unit I: Map: Definition and types – Geo-coordinate System: Latitude and Longitude. Time Zone and International date line.

Unit II: Scales: Meaning and types – Construction of Linear, Comparative and Diagonal Scales – Conversion of Scales.

Unit III: Measurement of Distance: Thread, Divider and Rotometer methods. Measurement of Area: Square and Strip methods. Enlargement and Reduction of Map: Square and Similar Triangle methods.

Unit IV: Representation of Relief features – Interpolation of Contours – Contour diagrams with Cross-section.

Unit V: Representation of Climatic Data: Climatic Graphs, Climograph, Hythergraph and Ergograph – Wind-rose diagram.

Reference Books:

1. Singh, G. (1996). *Map Work and Practical Geography*. Vikas Publishing House Pvt. Ltd., New Delhi.
2. Khan Z.A. (1998). *Text Book of Practical Geography*. Concept Publishing Co., New Delhi.
3. Khullar, D.R. (2004). *Essentials of Practical Geography*. New Academic Publishing Co., Jalandhar.
4. Monkhouse, F.J. and Wilkinson, H.R. (1971). *Maps and Diagrams (3rd Edition)*. Methuen & Co., London.
5. Negi, B.S. (1998). *Practical Geography*. Kedarnath and Ramnath, Meerut.

Semester IV

Core Course - Practical - II
MAP INTERPRETATION AND SOCIO-ECONOMIC DATA REPRESENTATION

Paper Code: 17UGGP02

Unit I: Meteorological Signs and Symbols – Station Models – Study and Interpretation of Weather Reports of India (January, July, May and November only).

Unit II: Indian Topographical Maps: Conventional Signs and Symbol – Interpretation of Indian Topographical maps: Physical features (Plain, Plateaus, Hills and Mountains) and Cultural features (Transportation and Settlement).

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. Monkhouse, F.J. and Wilkinson, H.R. (1971). *Maps and Diagrams (3rd Edition)*. Methuen & Co., London.
2. Singh, G. (1995). *Map Work and Practical Geography (3rd Edition)*. Vikas Publishing House Pvt. Ltd., New Delhi.
3. Khan, M.Z.A. (1998). *Text Book of Practical Geography*. Concept Publishing Company, New Delhi.
4. Misra, R.P. and Ramesh, A. (1989). *Fundamentals of Cartography*. Concept Publishing Company, New Delhi.
5. Negi, B.S. (1998). *Practical Geography*. Kedarnath and Ramnath, Meerut.
6. Saha, P. and Basu, P. (2013). *Advanced Practical Geography*. Kolkata Books and Allied Publisher, Kolkata.

Semester VI

Core Course - Practical - III
MAP PROJECTIONS AND SURVEYING

Paper Code: 17UGGP03

Unit I: Map Projections: Definition, Significance and Classification – Construction and Classification – Construction of Zenithal Projections: Equidistant, Equal Area, Gnomonic and Orthographic (or) Stereographic Projections.

Unit II: Construction of Cylindrical Projection: Equidistant, Equal Area and Mercator Projections – Simple Conical Projections with One and Two Standard Parallels – Bone's and Polyconic Projections.

Unit III: Surveying: Chain Survey: Triangulation, Open and Closed Traverse – Prismatic Campus: Open and Closed Traverse.

Unit IV: Plane Table Survey: Open and Closed Traverse - Correction of Closing Errors - Bowditch Method - Finding of Resection Points: Trial and Error Methods and Tracing Paper methods (Three Points only).

Unit V: Survey with Indian Clinometers and Abney Level: Accessible and Inaccessible Methods - Dumpy Level - Collimation Method, Calculation of Heights**.**

Reference Books:

1. Jayachandaran, S. (1964). *Practical Geography (Tamil Edition)*. Tamil Nadu Text Book Society, Chennai.
2. Khan, M.Z.A. (1998). *Text Book of Practical Geography*. Concept Publishing Company, New Delhi.
3. Negi, B.S. (1998). *Practical Geography*. Kedarnath and Ramnath, Meerut.
4. Singh, G. (1995). *Map Work and Practical Geography (3rd Edition)*. Vikas Publishing House Pvt. Ltd., New Delhi.
5. Monkhouse, F.J. and Wilkinson, H.R. (1971). *Maps and Diagrams (3rd Edition)*. Methuen & Co., London.

Semester VI

Core Course - Practical - IV
REMOTE SENSING TECHNIQUES IN GEOGRAPHY

Paper Code: 17UGGP04

Unit I: Remotely Sensed Data Product – Aerial Photos: Types, Scale of Photos – Marginal Information of Aerial Photos – Stereo Vision Tests.

Unit II: Satellite Imagery: Data Acquiring Techniques – Marginal Information – Basic Elements of Image Interpretation – Interpreting Equipments: Viewing and Measuring Instruments.

Unit III: Aerial Photo Interpretation: Tracing and Interpreting the Aerial Photographs.

Unit IV: Satellite Image Interpretation: Tracing and Interpreting the given Satellite Data.

Unit V: Comparative Study of Map Information:

1) Air Photos and Topographic Maps
2) Air Photos and Satellite Images.
3) Satellite Images and Topographic maps.

Reference Books:

1. Barrett, E.C. and Curtis, L.F. (1992). *Introduction to Environmental Remote Sensing*. Chapman and Hall Publications, London.
2. Campbell, J.B. and Wynne, R.H. (1987). *Introduction to Remote Sensing*. The Guilford Press, New York.
3. Lillesand, T.M. and Kiefer, R.W. (1987). *Remote Sensing and Image Interpretation*. John Willy and Sons, New York.
4. Lueder, D.R. (1959*). Aerial Photographic Interpretation – Principles and Applications*. McGraw Hill Book Co., New York.
5. Wolf, P.R. (1974). *Elements of Photogrammetry: with Air Photo Interpretation and Remote Sensing*. McGraw Hill Book Co., New York.

Semester II

Skill-Based Elective Courses (SBEC)
FUNDAMENTALS OF PHYSICAL GEOGRAPHY

Paper Code: 17UGGS01

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, Current, Tide, Coral reefs, Ocean deposits and Resources.

Unit V: Biogeography: Elements of biogeography – Environment, Habitat, Plant and animals – Distribution Groupings – Distribution of forests and major communities.

Reference Books:

1. Dayal, P. A., (1996). *Text Book of Geomorphology*. Shukla Book Depot, Patna.
2. Sivamoorthy, A., (1964). *Geomorphology (Tamil Edition)*. Tamil Nadu Text Book Society, Chennai.
3. Lal, D.S., (1989). *Climatology*. Chaitanya Publisher's House, Allahabad.
4. Critchfield, H., (1975). *General Climatology*. Prentice-Hall, New York.
5. Christopherson, R.W. (2011). *Geosystems: An Introduction to Physical Geography (*8th Edition). Prentice Hall, New Jersey.

Semester III

Skill-Based Elective Courses (SBEC)
GEOGRAPHY OF TRAVEL AND TOURISM

Paper Code: 17UGGS02

Unit I: Tourism: Scope and Content – Basic components of tourism: Attraction, Accessibility and Accommodation – Factors affecting tourism activities – Types of tourism.

Unit II: Travel documents: Passport and Visa – types – Tourist facilities and services: Transport facilities – Accommodation, Catering and Hospitality – Entertainment, Trade, Fairs, Festival, Sports and Games.

Unit III: Accommodation: Significance and role in tourism industry – Hotel types, Motels, Choutries, Guest Houses, Youth Hostels, Tour operators.

Unit IV: Tourism and Travel agencies – functions – 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 Centers of India – Selected Centres only (Jaipur, Agra, Shimla, Ajanta and Ellora) – A Geographical study of tourist centres: Udgamandalam, Kodaikanal, Yercaud, Bangalore and Mysore.

Reference Books:

1. Seth, P.N. and Bhat, S.S. (2012). *An Introduction to Travel and Tourism*. Sterling Publishers Private Ltd., New Delhi.
2. Ghosh, B. (2009). *Tourism and Travel Management (2nd Edition)*. Vikas Publishing House Pvt. Limited. New Delhi.
3. Singh, A.P. (1989). *Himalayan Environment and Tourism*. Chugh Publications, Allahabad.
4. Kaul, R.N. (1985). *Dynamics if Tourism: A Trilogy*. Sterling Publishers Pvt. Limited, New Delhi.
5. Bhatia, A.K. (2002). *Tourism Development: Principles and Practices*. Sterling Publishers Pvt. Limited, New Delhi.
6. Singh, S.N. (1985). *Geography of Tourism and Recreation with Special Reference to Varanasi*. Inter India Publication, New Delhi.
7. Das, M. (1983). *India, a Tourist Paradise: Introducing a Wonderful Land and a Wonderful People*. Sterling Publishers Pvt. Limited, New Delhi.

Semester V

Skill-Based Elective Courses (SBEC)

PHISICAL GEOGRAPHY OF INDIA

Paper Code: 17UGGS03

Unit I: Introduction – Location – Structure and Relief – Physiographic Divisions.

Unit II: Climate of India- Factors Determining – Mechanism of Indian Monsoon – The Rhythm of Seasons – Distribution of Rainfall – Climatic Region of India.

Unit III: Drainage Systems of India – Himalayan System – Peninsular System.

Unit IV: Natural Vegetation – Forest types and Distribution – Forest covers in India – Wild life and Biosphere reserves of India – Conservation of Wild life.

Unit V: Soils of India – Major types and distribution – Soil degradation – Soil Conservation – Natural calamities.

Reference Books:

1. Singh, G. (1976). *A Geography of India*. Atma Ram & Sons Pub., New Delhi.
2. NCERT (2002). *India Physical Environment (Class IX)*. NCERT Publications, New Delhi.
3. Siddhartha, K. and Mukherjee, S. (2013). Geography through Maps (11th Edition). Kisalaya Publications Pvt. Ltd., New Delhi.
4. Husain, M. (2014). *Geography of India (5th Edition)*. McGraw Hill Education, New Delhi.
5. Tirtha, R. (2002). *Geography of India.* Rawat Publications, Jaipur.

Semester V

Skill-Based Elective Courses (SBEC)
FUNDAMENTALS OF CARTOGRAPHY

Paper Code: 17UGGS04

Unit I: Cartography – Nature, Scope and Content of Cartography – Arts and Science of Cartography – Cartography as a system of communication – Maps – Classification and their uses – Growth, development and modern trends in cartography.

Unit II: Map drawing and Measuring Techniques – Map Setting – The Earth and System of Co-ordinates – Base Map – Compilation and Generalization of Maps.

Unit III: Symbolization: Types of Cartographic symbols – Point, Line, and Area symbols – Qualitative and Quantitative data generalization.

Unit IV: Map Design and Layout: General design problems – Principles of Cartographic design and design of map symbols – Lettering – Lettering methods, Positioning of letters – Geographical names.

Unit V: Map Reproduction – Process of Map production –Photographic systems – Multiple Reproduction Processes – Computer application in Cartography – Computer mapping – Remote Sensing and Cartography – Uses of Air photographs and Satellite images in Cartography.

Reference Books

1. Misra, R.P. and Ramesh, A. (1989). *Fundamentals of Cartography*. Concept Publishing Company, New Delhi.
2. Monkhouse, F.J. and Wilkinson, H.R. (1971). *Maps and Diagrams (3rd Edition)*. Methuen & Co., London.
3. Robinson, H. (1995). *Elements of Cartography (6th Edition)*. John Wiley & Sons, New York.
4. Sethurakkayi, S. (2005). *Cartography (Tamil Edition)*. Shanmugam Publications, Madurai.
5. Keates, J.S. (1989). *Cartographic Design and Production (2nd Edition)*. Longman Scientific and Technical, Essex.
6. Raize, E. (1982). *Principles of Cartography*. McGraw Hill Publicatins, New York.

Semester VI

Skill-Based Elective Courses (SBEC)
PRINCIPLES OF SURVEYING

Paper Code: 17UGGS05

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 – Bowditich's method of correction – calculation of bearings from included angels.

Unit IV: Plane Table – Equipments – Methods of plane table survey – preparation work for the plane table survey – Leveling and Orientating the table - Resection points – Trial and Error Method – Tracing Paper Method – Advantages and Disadvantages of plane table survey.

Unit V: Height measurement – Determination of height – by Dumpy level – Parts of Dumpy level – Methods of dumpy level survey – Height measurement by Indian Clinometer and Abney level.

Reference Books:

1. Singh, K.L.R. and Singh, R. (1970). *Map Work and Practical Geography*. Central Book Depot, Allahabad.
2. Jayachandaran, S. (1964). *Practical Geography (Tamil Edition)*. Tamil Nadu Text Book Society, Chennai.
3. Saha, P. and Basu, P. (2013). *Advanced Practical Geography*. Kolkata Books and Allied Publisher, Kolkata.
4. Alvi, Z. (1998). *A Text book of Practical Geography*. Sangam Books Limited, Hyderabad.
5. Herubin, C.A. (1991). *Principles of Surveying (4th Edition)*. Prentice Hall, New Jersey.

Semester VI

Skill-Based Elective Courses (SBEC)
AN INTRODUCTION TO SOCIAL GEOGRAPHY

Paper Code: 17UGGS06

Unit I: Population – World Population distribution – factors affecting population – growth of population – theories: Malthus, Optimum and Demographic Transition.

Unit II: Migration–Settlement: Rural and Urban – Site and Situation – classification – Urbanization – Regional Studies – Concept-Types: Formal, Functional, Natural, Agricultural, Industrial and Cultural Regional of the World.

Unit III: Resources of the World: Resource types – Agriculture: Distribution and Production of Paddy, Wheat, Tea and Coffee – Forest types – Distribution – Fisheries.

Unit IV: 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, Urbanization.

Reference Books:

1. Ahmed, A. (2004). *Social Geography*. Rawat Publication, New Delhi.
2. Chapman, K. (1979). *People, Pattern and Process – An Introduction to Human Geography*. Edward Arnold Ltd., London.
3. Jones, E. and Eyles, J. (1977). *An Introduction to Social Geography*. Oxford University Press, Oxford.
4. Kolars, J.E. and Nystuen, J.D. (1974). *Geography*. McGraw Hill Book Co., London.
5. Dickinson, R.E. (1964). *City and Region*, Routledge, London.
6. Leong, G.C. and Morgan, G.C. (1982*). Human and Economic Geography*. Oxford University Press, London.

Semester V

Elective Courses (EC)

BIO GEOGRAPHY

Paper Code: 17UGGE01

Unit I: Bio-geography: Definition, Scope and significance 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..

Unit II: Basic Ecological Principles – Bio-energy cycle in the Terrestrials Eco-system – Tropical level and food chain. Concepts of Biome, Eco-tone 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 affects 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. Robinson, H. (1972). *Biogeography*. Macdonald and Evans Publication, London.
2. Singh, S. (1991). *Environmental Geography*. Prayag Pustak Bhawan, Allahabad.
3. Pears, N. (1993). *Basic Biogeography*. Longman Publications, London.
4. Newbigin, M. (1968). *Plant and Animal Geography*. Geography. Egmont Books Ltd., London.
5. Saxena, H.M. (2004). *Environmental Geography (2nd Edition)*. Rawat Publications, Jaipur.

Semester V

Elective Courses (EC)
REMOTE SENSING AND GIS

Paper Code: 17UGGE02

Unit I: Remote Sensing: Definition and Types: Aerial, Satellite and Radar, Development of Space Programmes – History and Organization Associated with Remote Sensing in India and in other Countries.

Unit II: Remote Sensing Processes: Sources of Energy, Electromagnetic Radiations (EMR) Atmospheric Windows, Energy Interaction with Atmosphere and Earth, Types of Platforms, Active and Passive Remote Sensing Methods, Ideal Remote Sensing Systems.

Unit III: Fundamentals of Aerial Remote Sensing: Components of Aerial Camera, Types of Aerial Photographs, Marginal Information of Aerial Photographs, Elements of Photo Interpretation.

Unit IV: Fundamentals of Satellite Remote Sensing: Types of Satellites: Geo-stationary and Sun-synchronous Satellites, Resolution: Spatial, Spectral, Radiometric and Temporal, Types of Data Products, Marginal Information of Satellite Images.

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. Barrett, E.C. and Curtis, L.F. (1992). *Introduction to Environmental Remote Sensing*. Chapman and Hall Publications, London.
2. Campbell, J.B. and Wynne, R.H. (1987). *Introduction to Remote Sensing*. The Guilford Press, New York.
3. Lillesand, T.M. and Kiefer, R.W. (1987). *Remote Sensing and Image Interpretation*. John Willy and Sons, New York.
4. Lueder, D.R. (1959*). Aerial Photographic Interpretation – Principles and Applications*. McGraw Hill Book Co., New York.
5. Wolf, P.R. (1974). *Elements of Photogrammetry: with Air Photo Interpretation and Remote Sensing*. McGraw Hill Book Co., New York.

Semester VI

Elective Courses (EC)

ECONOMIC GEOGRAPHY OF INDIA

Paper Code: 17UGGE03

Unit I: India and its Neighbouring Countries – Political Division – Political Boundaries with Neighbouring Countries- Indian Agriculture: Importance – Suitable conditions for cultivation of major food crops.

Unit II: Production and Distribution of major Commercial crops- Sugarcane – Tea – Coffee – Cotton – Tobacco- Problems of Indian Agriculture – Green revolution.

Unit III: Mineral and Power Resources – Iron ore, Bauxite, Manganese and their distribution – Power Resources: Hydel Power, Thermal Power, Atomic and wind power

Unit IV: Industries: Iron and Steel, Cotton textile- Petro-chemical, Automobile Production and their distribution – Major Industrial Region of India – Transport – Road, Railway , Water way and Air ways – Major Trade in India.

Unit V: Population: Spatial Distribution and Density – Population Growth, Urban and Rural Population – Urbanization – Smart Cities in India.

Reference Books:

1. Singh, G. (1976). *A Geography of India*. Atma Ram & Sons Pub., New Delhi.
2. NCERT (2002). *India Physical Environment (Class IX)*. NCERT Publications, New Delhi.
3. Siddhartha, K. and Mukherjee, S. (2013). Geography through Maps (11th Edition). Kisalaya Publications Pvt. Ltd., New Delhi.
4. Husain, M. (2014). *Geography of India (5th Edition)*. McGraw Hill Education, New Delhi.
5. Sharma, T.C. and Coutinho, O. (1978). *Economic and Commercial Geography India (2nd Edition)*. Vikas Publishing House Pvt Ltd., New Delhi.
6. Mamoria, C.B. (1980). *Economic and Commercial Geography of India*. Shiva Lal Agarwala & Company, Agra.
7. Dubey, R.N. and Negi, B.S. (1968). *Economic and Commercial Geography of India*. Kitabmahal, Allahabad.
8. Tiwari, R.C. (2010). *Geography of India*. Prayag Pustak Bhawan, Allahabad.

Semester III

Non-Major Elective Courses (NMEC)
GEOGRAPHY OF INDIA

Paper Code: 17UGGN01

Unit I: General Aspect: Location and Extent – Neighbouring Countries – Administrative Units – Major Physiographic Division.

Unit II: Climate: Seasons and Monsoon – Major River system – Irrigation – Type and Distribution – Major Multipurpose Projects.

Unit III: Natural Vegetation – Major Soil type – Agricultural Distribution and Production of Major Crops – Rice, Wheat, Tea, Coffee, Rubber, Sugarcane and Cotton.

Unit IV: Mineral Resources and their Distribution – Iron ore, Manganese, Bauxite, Power Resources and their Distribution – Hydel, Atomic, thermal and Wind energy.

Unit V: Major Industries – Cotton Textiles, Iron and Steel – Population Distribution – Transport, Trade and Commerce.

Reference Books:

1. Singh, G. (1976). *A Geography of India*. Atma Ram & Sons Pub., New Delhi.
2. NCERT (2002). *India Physical Environment (Class IX)*. NCERT Publications, New Delhi.
3. Siddhartha, K. and Mukherjee, S. (2013). Geography through Maps (11th Edition). Kisalaya Publications Pvt. Ltd., New Delhi.
4. Husain, M. (2014). *Geography of India (5th Edition)*. McGraw Hill Education, New Delhi.
5. Sharma, T.C. and Coutinho, O. (1978). *Economic and Commercial Geography India (2nd Edition)*. Vikas Publishing House Pvt Ltd., New Delhi.
6. Mamoria, C.B. (1980). *Economic and Commercial Geography of India*. Shiva Lal Agarwala & Company, Agra.
7. Dubey, R.N. and Negi, B.S. (1968). *Economic and Commercial Geography of India*. Kitabmahal, Allahabad.
8. Tiwari, R.C. (2010). *Geography of India*. Prayag Pustak Bhawan, Allahabad.

Semester IV

Non-Major Elective Courses (NMEC)
GEOGRAPHY OF TAMIL NADU

Paper Code: 17UGGN02

Unit I: Location and Extend: Administrative units – Major relief features Major rivers – Climate: temperature, Seasonal and Annual rainfall distribution, Soil: types and their distribution.

Unit II: Forest, Livestock and Fisheries: Types and distribution, forest products, Livestock: cattle, sheep, dairying and fisheries-inland and deep-sea fishing.

Unit III: Irrigation and Agriculture Resources: types and distribution – canal, tank and well irrigation, Agriculture: distribution and production of rice, cotton, sugarcane, and rain fed crops, oil seeds, tea and coffee.

Unit IV: Mineral and Industrial Resources: General distribution and production. Power resources: Hydel, thermal, atomic and wind power, Industries: distribution and production of – cement, sugar, cotton, automobile and paper.

Unit V: Transport: Development and distribution of roads, railways, air and sea transportation - Important ports, Population – growth and distribution of rural and urban population.

Reference Books:

1. Kumaraswamy, S.V. (2014). Geography of Tamil Nadu (Tamil Edition), Sakthi Abirami Pathipagam, Coimbatore.
2. SHBoTN (2004). *Statistical Hand Book of Tamil Nadu*. Department of Economics and Statistics, Government of Tamil Nadu, Chennai.
3. TNEA (2014). *Tamil Nadu – An Economic Appraisal 2011-12 to 2013-14*. Department of Evaluation and Applied Research, Chennai.
4. SCRoTN (2004). *Season and Crop Report of Tamil Nadu for the Agricultural Year 2003-2004*. Department of Economics and Statistics, Chennai.

PRACTICAL MODEL QUESTION PAPER

PERIYAR UNIVERSITY
B.Sc., DEGREE EXAMINATION
(For the candidates admitted from 2017-2018 onwards)

Name of the course: **B.Sc., GEOGRAPHY**

Title of the Paper **- Practical-III: PROJECTIONS AND SURVEYING**

Paper Code: **17UGGP03**
Semester – VI

Time: 3 Hours Max. Marks: 60
For Practical: (5 x 10) = 50
For Record = 10

Answer ALL question
(*All Questions carry equal marks*)

1. Draw a zenithal equal area projection for the reduced earth of 2 inches for northern hemisphere. The latitude and longitudinal interval is 15°.
   2 mqFyk MuKss RUffggll Nfhsjjpd tlgFjpiaf fhlLk xU rkgugG crrprrllk tiuf. mjpy mlrfqfSk, juffqfSk 15º ,ilntspapy ,UfFkhW Fwpff.

2. Measure and plot the distance between C_1, C_2 and C_3 points of the given building with the use of chain survey.
   rqfpy; mstpiag gadgLjjp nfhLffggll flbljjpd C1, C2 kwWk C3 KidfSfF ,ilNaAss J}ujij mseJ glk tiuf.

3. Find the height of the given building through inaccessible method by using the Indian Clinometer.
   ,ejpa fpisNdhklliug gadgLjjp nfhLffggll flbljjpd caujij mZfh Kiwapy fzLgpbffTk.

4. By using the Dumpy level find out the elevation difference of given three points of A, B and C.
   kll khdpiag gadgLjjp nfhLffgglLss A, B, kwWk C Gsspfsfs ,ilNaAss cauT kwWk jhotpid fzLgpbffTk.

5. Write a short note on: rpWFwpgG vOJf.

   a) Bowditch method of correction - ngsbr Kiwapy gpio efFjo
   b) Alidade - NeuNfhy
   c) Abney Level. - mgNd kllk
   d) Properties of Lambert Projection. - yhkgul NfhlLrrlljjpd gzGfs

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THEORY MODEL QUESTION PAPER

Sl.No. 243 **Course Code: 17UGG04**

PERIYAR UNIVERSITY

B.Sc., DEGREE EXAMINATION

(For the candidates admitted from the year 2017-18 onwards)

MAJOR SUBJECT: GEOGRAPHY

REGIONAL GEOGRAPHY OF TAMIL NADU

Time: 3 Hours **Maximum Marks: 75**

Section - A (10 x 2 = 20 Marks)

Answer all questions

1. Location of Tamil Nadu.
   jk;oehlbd mikt;lk.
2. Seasons of Tamil Nadu.
   jk;oehlbd gUtqfs.
3. Plantation farming.
   Njhllgga;h t;trhak.
4. Commercial crops.
   tz;fg ga;hfs.
5. Primary professions.
   Kjye;iyj njho;yfs.
6. Detroit of South Asia.
   njwfhr;ahtd nlluhal.
7. Rural and Urban population of Tamil Nadu.
   jk;oehlbd f;uhkk kwWk efu kffsnjhif.
8. Literacy rate of Tamil Nadu.
   jk;oehlbDila fyt;awT t;f;jk.
9. Transport.
   NghfFtujJ.
10. Major ports of Tamil Nadu.
    jk;oehlbd ngh;a JiwKfqfs

Section - B (5 x 5 = 25 Marks)

Answer all the questions choosing either (a) or (b)

11. a) Give a brief account on the hilly regions of Tamil Nadu.
    jk;oehlbd kiyfs gww; RUffkhf jUf.

    (or)

    b) Briefly explain the rainy seasons of the state.
    khe;yjj;d kiogngho;T fhyfllqfs gww; RUffkhf t;sfFf.

12. a) Write a note on the irrigation methods in Tamil Nadu.
jkpoehlby css fhytha Kiwfs Fwpj J xU FwpgG vOJf.

(or)

b) Give a note on the distribution of cement industries in Tamil Nadu.
jkpoehlby css rpnkzl njhopwrhiyfspd guty Fwpj J xU FwpgG vOJf.

13. a) Explain the factors determining the location of industries in Tamil Nadu.
njhopy mikt plj ij ephzapfFk fhuzpfis tpsfFf.

(or)

b) Briefly describe the sugar industries.
rhffiu Miyfs Fwpj J RUffkhf tpsfFf.

14. a) Write a short notes on the factors influencing the distribution of population.
kffsnjhif gutiyf flLggLjJk fhuzpfs gwwp rpW FwpgG vOJf.

(or)

b) Give an account population of Tamil Nadu.
jkpoehlbd kffsnjhif Fwpj J xU njhFgG jUf.

15. a) Explain types of road transportation.
rhiyNghfF tujjpd tiffis tpthp.

(or)

b) List out the airports of Tamil Nadu.
jkpoehlbd tpkhdepiyaqfis glbaypLf.

Section - C (3 x 10 = 30 Marks)

Answer any THREE questions.

16. Explain about the types of forests in Tamil Nadu.
jkpoehlby css fhLfspd tiffs gwwp tpsfFf.

17. Elucidate about the importrance of agriculture.
tptrhajjpd Kffpajtk gwwp ntspFzhf.

18. Describe the power resources.
rfjp tsqfis tpthp.

19. Explain the density of population in Tamil Nadu.
jkpoehlbd kffsnjhif mlhjjp Fwpj J tpsffTk.

20. Detailed explain about the different types of transportation.
NghfF tujjpDila gyNtW tiffs gwwp tphpthf tpsfFf.

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