

GOVERNMENT ARTS COLLEGE (AUTONOMOUS), KARUR – 639 005

B.Sc. GEOGRAPHY COURSE STRUCTURE UNDER CBCS SYSTEM

(For the candidates admitted from the year 2011-2012 onwards)

| SEMESTER | COURSE | SUBJECT TITLE | SUBJECT CODE | INSTR. HOURS WEEK | CREDIT | EXAM HOURS | MARKS | | TOTAL |
|--------------|---------------------------|--|--------------|-------------------|------------|------------|-------|-----|-------------|
| | | | | | | | INT | ESE | |
| I | Tamil - I | Tamil – I | U11L1T1 | 6 | 3 | 3 | 25 | 75 | 100 |
| | English - I | English - I | U11L1E1 | 6 | 3 | 3 | 25 | 75 | 100 |
| | Core Course - I | Geomorphology | U11GE1C1 | 6 | 5 | 3 | 25 | 75 | 100 |
| | Core Course - II | Practical – I Scales, Relief & Climatic diagram | - | 3 | - | - | - | - | - |
| | First Allied Course – I | Statistics –I | U11GE1A1 | 5 | 3 | 3 | 25 | 75 | 100 |
| | First Allied Course - II | Statistics II (Practical) | | 2 | - | - | | | |
| | Environmental Studies | Environmental Studies | UES1 | 2 | 2 | 3 | 25 | 75 | 100 |
| | | | | 30 | 16 | | | | 500 |
| II | Tamil - II | Tamil – II | U11L2T2 | 6 | 3 | 3 | 25 | 75 | 100 |
| | English – II | English– II | U11L2E2 | 6 | 3 | 3 | 25 | 75 | 100 |
| | Core Course - II | Practical – I Scales, Relief & Climatic diagram | U11GE2C2P | 3 | 4 | 3 | 25 | 75 | 100 |
| | Core Course – III | Climatology | U11GE2C3 | 6 | 5 | 3 | 25 | 75 | 100 |
| | First Allied Course – II | Statistics – II (Practical) | U11GE2A2P | 2 | 4 | 3 | 25 | 75 | 100 |
| | First Allied Course – III | Statistics – III | U11GE2A3 | 5 | 3 | 3 | 25 | 75 | 100 |
| | Value Education | Value Education | UVE2 | 2 | 2 | 3 | 25 | 75 | 100 |
| | | | | 30 | 24 | | | | 700 |
| III | Tamil - III | Tamil- III | U11L3T3 | 6 | 3 | 3 | 25 | 75 | 100 |
| | English – III | English - III | U11L3E3 | 6 | 3 | 3 | 25 | 75 | 100 |
| | Core Course – IV | Oceanography | U11GE3C4 | 6 | 5 | 3 | 25 | 75 | 100 |
| | Core Course – V | Practical – II -Map Interpretation and Representation of Socio Economic Data | - | 3 | - | - | -- | -- | --- |
| | Second Allied Course I | Cartography - I | U11GE3A1 | 5 | 3 | 3 | 25 | 75 | 100 |
| | Second Allied Course II | Cartography – II (Practical) | - | 2 | - | - | -- | -- | --- |
| | Non Core Elective I | Speak Better Write Better. | U11EN3N1 | 2 | 2 | 3 | 25 | 75 | 100 |
| | | | | 30 | 16 | | | | 500 |
| IV | Tamil – IV | Tamil- IV | U11L4T4 | 6 | 3 | 3 | 25 | 75 | 100 |
| | English – IV | English -IV | U11L4E4 | 6 | 3 | 3 | 25 | 75 | 100 |
| | Core Course – V | Practical – II -Map Interpretation and Representation of Socio Economic Data | U11GE4C5P | 5 | 4 | 3 | 25 | 75 | 100 |
| | Core Course – V I | Geography of Asia | U11GE4C6 | 2 | 5 | 3 | 25 | 75 | 100 |
| | Second Allied Course II | Cartography – II (Practical) | U11GE4A2P | 2 | 4 | 3 | 25 | 75 | 100 |
| | Second Allied Course III | Cartography - III | U11GE4A3 | 5 | 3 | 3 | 25 | 75 | 100 |
| | Skill Based Elective I | Geography of Tourism | U11GE4S1 | 2 | 4 | 3 | 25 | 75 | 100 |
| | Non Core Elective II | English for competitive Examination. | U11EN4N2 | 2 | 2 | 3 | 25 | 75 | 100 |
| | | | | 30 | 28 | | | | 800 |
| V | Core Course – VII | Human Geography | U11GE5C7 | 5 | 5 | 3 | 25 | 75 | 100 |
| | Core Course – VIII | Geography of Resources – I | U11GE5C8 | 5 | 4 | 3 | 25 | 75 | 100 |
| | Core Course – IX | Geography of India | U11GE5C9 | 5 | 4 | 3 | 25 | 75 | 100 |
| | Core Course - X | Practical – III - Remote sensing applications in Geography | - | 3 | - | - | - | - | - |
| | Core Course - XI | Practical – IV - Map Projection and Surveying | - | 3 | - | - | - | - | - |
| | Elective Course - I | Geography of Tamilnadu | U11GE5E1 | 5 | 5 | 3 | 25 | 75 | 100 |
| | Skill Based Elective II | Computer Applications in Geography | U11GE5S2 | 2 | 4 | 3 | 25 | 75 | 100 |
| | Skill Based Elective III | Disaster Management | U11GE5S3 | 2 | 4 | 3 | 25 | 75 | 100 |
| | | | | 30 | 26 | | | | 600 |
| VI | Core Course – X | Practical – III - Remote sensing applications in Geography | U11GE6C10P | 3 | 4 | 3 | 25 | 75 | 100 |
| | Core Course – XI | Practical – IV - Map Projection and Surveying | U11GE6C11P | 3 | 5 | 3 | 25 | 75 | 100 |
| | Core Course – XII | Basics of Remote Sensing and GIS | U11GE6C12 | 6 | 5 | 3 | 25 | 75 | 100 |
| | Core Course – XIII | Geography of Resources - II | U11GE6C13 | 6 | 5 | 3 | 25 | 75 | 100 |
| | Elective Course - II | Bio - Geography | U11GE6E2 | 5 | 5 | 3 | 25 | 75 | 100 |
| | Elective Course - III | Urban and Regional Planning | U11GE6E3 | 6 | 4 | 3 | 25 | 75 | 100 |
| | Extension Activities | Extension Activities | | - | 1 | - | - | - | - |
| | Gender Education | 8UEA6 | 1 | 1 | 3 | 25 | 75 | 100 | |
| | | | | 30 | 30 | | | | 700 |
| TOTAL | | | | 180 | 140 | | | | 3800 |

Sl. No.: 1121

Subject Code:

U11GE1C1

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.Sc., - GEOGRAPHY – SEMESTER - I – CORE COURSE - I

(For the candidates admitted from 2011-12 onwards)

GEOMORPHOLOGY

- Unit – I** Geomorphology: Meaning, Nature and Scope - Solar System – Origin of the Earth – Nebular Hypothesis – Internal Structure of the Earth
- Unit- II** Rocks: Igneous – Sedimentary - Metamorphic: Weathering and its Types.
- Unit-III** Earth Movements – Endogenic forces Fold, Fault – Earthquakes, Volcanoes – Continental Drift – Plate Tectonics.
- Unit-IV** Exogenetic Process: Geomorphic Work of Rivers – Erosional and Depositional landforms. Under Ground Water – Karst Topography.
- Unit-V** Glaciers: Types – Erosional and Depositional landforms: Aeolian landforms. Sea Waves and Coastal landforms.

Reference:

1. Ahmad, E., (1985) Geomorphology, Kalia Publishers, New Delhi.
2. Bloom, A.L., (2003) Geomorphology a Systematic Analysis of Late Cenozoic Landforms, Pearson Education, Delhi.
3. Dayal. P., (1996) A Text Book of Geomorphology, Shakla Book Depot, Patna.
4. Thornbury, W.D., (1969) Principles of Geomorphology, Wiley Eastern Limited, New Delhi.
5. Worcester, P.G (1948) A Text Book of Geomorphology Van Nuswand Reinhold Company, New York.

CHAIRMAN

COE

Sl. No.: 12P5

Subject Code:

U11GE2C2P

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.Sc., GEOGRAPHY - SEMESTER – I & II – CORE COURSE – II

(For the candidates admitted from 2011-2012 onwards)

SCALES, RELIEF AND CLIMATIC DIAGRAMS – PRACTICAL - I

- Unit - I** Scales – Definition – Conversion - Types – Construction of Plain, Linear, Comparative, Diagonal and Time Scales
- Unit- II** Measurement of Distance – Areas – Directions and Bearings.
- Unit - III** Methods of Enlargement – Reduction and Compilation of maps.
- Unit-IV** Representation of Relief features on Maps – Contours – Interpolation of Contours – Methods of Showing land forms by Contour – Cross Sections.
- Unit-V** Representation of Climatic Data: Line Diagram – Bar Diagram – Climograph. Hythergraph – Ergograph – Wind Rose – Rainfall Dispersion Diagram.

Reference

1. Singh, R.L, (1991) Elements of Practical Geography – Kalyani Publishers, New Delhi
2. Monkhouse and Wilkinson (1976) Maps and Diagrams, Metuhuen & Co, London
3. Gobal Singh () Map Work and Practical Geography, Vikas Publishing House Pvt Ltd, New delhi.

CHAIRMAN –BOS

COE

Sl. No.: 1221

Subject Code:

U11GE2C3

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.Sc., GEOGRAPHY - SEMESTER II – CORE COURSE - III

(For the candidates admitted from 2011-12 onwards)

CLIMATOLOGY

- Unit – I** Climate: Definition – Weather and Climate - Climatic Elements — Components and Structure of the Atmosphere.
- Unit – II** Insolation: Controlling factors – Distribution. Heat Budget of the earth atmosphere. Temperature: Controlling factors – Horizontal distribution - Vertical distribution - Inversion of Temperature.
- Unit - III** Atmospheric Pressure: Horizontal Distribution - Major pressure belts of the World – shifting of Pressure belts: Winds – Planetary winds – Monsoons – Local Winds.
- Unit -IV** Humidity: Definition – Ways of expressing humidity. Condensation – Definition – Forms of condensation, Cloud and its major types.
- Unit - V** Cyclone – Anticyclone: Origin and Associated Weather - Koppens Climatic Classification.

Reference

1. Lal, D.S, (2010): Fundamentals of Climatology, Chaitanya Publishing House, Allahabad
2. Critchfield. J.H. (1975) General Climatology, Prentice Hall of India, Pvt. Ltd, New Delhi
3. Aswathi.A,(1995) Indian climatology, APH Publishing corporation, New Delhi.
4. Singh,S. (2005) Climatology, Prayag Pustak Bhavwan, Allahabad.
5. Oliver, J.E and J.J. Hidove, (2002) Climatology - An Atmospheric Science, Pearson Education, Delhi.
6. Trewarta, G.T (1968) , An Introduction to Climate, McGraw – Hill Kogakuga, Ltd, Tokyo
7. lockwood, J.G (1985) World Climatic System, Eward Arnold, Londaon.

CHAIRMAN –BOS

COE

Sl. No.: 1326

Subject Code:

U11GE3C4

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.Sc., - GEOGRAPHY – SEMESTER - III – CORE COURSE - IV

(For the candidates admitted from 2011-12 onwards)

OCEANOGRAPHY

- Unit - I** Oceanography: Definition, Nature, Scope and Significance – Distribution of Land and Sea– Relief features of the Ocean Floor: Continental Shelf, Continental Slope, Deep Sea Plains and Oceanic Deeps.
- Unit - II** Major Relief Features of the Atlantic, Pacific and Indian Oceans.
- Unit - III** Temperature and salinity: temperature controlling factors - Horizontal and Vertical Distribution of Temperature –Salinity: Definition - Controlling factors – Horizontal - Vertical Distribution – Density of the Sea water.
- Unit - IV** Dynamics of ocean water: Waves: Origin – Types. Tides: Origin – Types and effects. Currents: Controlling factors – Currents in the Pacific, Atlantic and Indian oceans.
- Unit - V** Marine Resources: Coral Reefs: Conditions for Growth, Types, Food and Mineral Resources.

REFERENCES:

1. Gross, M.G (1967) Oceanography Charles E Merrill Publishing Company, Ohio.
2. Moore, J.R (1967) Oceanography W.H Freeman and Company, San Francisco.
3. sharma, R.C and M vahal (1987) Oceanography for Geographers, Chaintanya Publishing Home, Allahabad.
4. Siddhartha, K (2005) oceanography a brief introduction, Kisalaya Publication Pvt, Ltd, Delhi.
5. Weisberg, J and H. parish (1974) introductory oceanography, MecGraw Hill Kogakuga, Ltd, Tokyo

CHAIRMAN –BOS

COE

Sl. No.: 1327

Subject Code:

U11GE3A1

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.Sc., - GEOGRAPHY – III - SEMESTER – SECOND ALLIED COURSE - I

(For the candidates admitted from 2011-12 onwards)

CARTOGRAPHY - I

- Unit- I** Introduction – History of Cartography – Scope of Cartography – Branches of Cartography.
- Unit- II** Maps: Definition - Need for Maps – Classification of Maps – Uses of Maps, Scales: types – uses.
- Unit-III** Map Symbolization: Point, Line and Area Symbols – Quantitative and Qualitative Representation. Map Compilation and Generalization.
- Unit-IV** Geographic Coordinates: latitudes – longitudes – International Date Line; Direction: True Magnetic and Gird North.
- Unit-V** Computer Assisted cartography – Basis basic concepts, Application.

Reference:

- 1 Misra R.P. and A.P.Ramesh (2000) Fundamentals of Cartography, Concept Publishing Company, New Delhi.
- 2 Robinson, Elements of Cartography, John Willy and Sons, New Delhi.
- 3 Keates J. S (1973) Cartographic Design and Production, Publisher Longman Inc. London
- 4 Raiz , (1962) Principles of Cartography – Publisher Mc. Graw Hill – London.
- 5 Sethurakkai, S, (2005) Pvipadaviyal: an Introduction, Shanmugam Publishing House, Madurai.

CHAIRMAN

COE

Sl. No.: 1328

Subject Code:

U11GE3N1

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.A., ENGLISH - III SEMESTER – NON – CORE ELECTIVE – I

(For the candidates admitted from 2011-2012 onwards)

DISASTER MANAGEMENT - I

- Unit- I** Disaster-Types of Disaster – Mitigation and Management.
Earthquake hazards – Effects of earthquake – Earthquake hazards in India
- Unit- II** – Mitigate and Management of earthquake.
- Unit-III** Volcanic hazards – Environmental impacts of volcanic eruptions –
Safeguarding procedure.
- Unit-IV** Land slide hazards – Land slide types – Effects of land slide – prevention
methods.
- Unit-V** Drought hazards – Types – Effects of drought – Drought hazards in India.

Reference

1. A Text book of Environmental Sciences S.S.Purohit., O.J .Sharamani and
A.K.Agarwal.
2. Environmental Pollution(Tamil) P.Chandrasekaran.
3. Environmental Geography - Savindra Singh.
4. Introduction to Environmental Science-V.Anjaneyelu.
5. Environmental Problems and Solutions-B.K.Sharama, Kaur.

CHAIRMAN –BOS

COE

Sl. No.: 14P7

Subject Code:

U11GE4C5P

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.Sc., - GEOGRAPHY – SEMESTER - IV – CORE COURSE - V

(For the candidates admitted from 2011-12 onwards)

**MAP INTERPRETATION AND REPRESENTATION OF SOCIO –
ECONOMIC DATA - PRACTICAL – II**

Unit-I Study of Topographic sheets of Survey of India: Conventional signs and symbols; Appreciation: Marginal – Extra marginal – Intra marginal Information's; Interpretation: Physical – cultural features.

Unit-II Study of Meteorological Signs and Symbols – Weather Station Model – Study and Interpretation of Weather maps of India.

Unit-III Methods of Representing Socioeconomic data: Line graph, Bar diagram, Pictorial diagram, Block diagram, Proportional Circles, Proportional spheres, Pie chart, Pyramid diagram.

Unit-IV Drawing of Distributional Maps – Dot maps., Isopleths, Choropleth

References:

1. Khan, I.A. (1998) Text book of Practical Geography, Concept Publishing Company, New Delhi.
2. Dury, G.H, A.H Moodie, H.C. Brook field (1972) Map Interpretation, Pitman Publishing London.
3. Monkose, F .J and H. R. Wilkinson (1976) Maps and Diagram, Methuen and Co Ltd, London.
4. Rampal, K. K (1993) Mapping and Compilation of Concept Publishing Company, New Delhi.
5. Ramamurthy, K (1982) Map Interpretation, Ramamurthy (Publishers) Madurai.
6. Singh, R. L. (1991) Elements of Practical Geography, Kalyani Publishers, New York.

CHAIRMAN –BOS

COE

Sl. No.: 1432

Subject Code:

U11GE4C6

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.Sc., - GEOGRAPHY – IV - SEMESTER – CORE COURSE - VI

(For the candidates admitted from 2011-12 onwards)

GEOGRAPHY OF ASIA

- Unit- I** Geographic location and extent – Locational significance – Physical divisions – Climate: Seasonal pattern of monsoons - Climatic regions.
- Unit- II** Natural vegetation – Types and distribution – Soil – Types and distribution – Drainage system.
- Unit-III** Agriculture; farms of cultivation – Major crops: Rice, Wheat, Cotton, Jute, Tea, Coffee and Rubber – Recent development in agriculture. Fishing – Inland and Marine.
- Unit-IV** Mineral resources – Distribution and production of Iron ore, Manganese, Copper, Tin, Gold, Gypsum and Mica. Industries; Locational factors – Textiles – Sugar – Iron and Steel.
- Unit-V** Population: Controlling factors – Growth- Distribution and Density
Transport – Roadways –Railways- Airways – Waterways.

Reference Books:

1. Introduction to Physical Hydrology () – Richard and Chorley – Methuen & Co Ltd
2. Manning, J.C (1989) Applied Principles of Hydrology, CBS Publishers. New Delhi.
3. Rangunath, H.M, ground water hydrology,
4. Ranjit Tirtha, (2001), geography of Asia, Rawat Publications, Jaipur.
5. Negai. B.S (1986), the continent of asia, s. chand and co.(Pvt)Ltd, New Delhi.

CHAIRMAN

COE

Sl. No.: 14P8

Subject Code:

U11GE4A2P

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR
B.Sc., - GEOGRAPHY – IV - SEMESTER – SECOND ALLIED COURSE - II

(For the candidates admitted from 2011-12 onwards)

CARTOGRAPHY -II - PRACTICAL

- Unit- I** Map types on the basis Information, Scale, Military use – Relief representation – special purpose - Qualitative and Quantitative maps.
- Unit- II** Cartography as science of human communication - Latitude and Distance – Longitude and Time – International date line – True, Magnetic and Grid north.
- Unit-III** Map symbolization: Qualitative and Quantitative Symbols - Point , Line and Area.
- Unit-IV** Map Format and Toponymy – Drawing Materials And Equipment.
- Unit-V** Grid System – Toposheet Layout and Numbering

References:

- 1 Misra R.P. and A.P.Ramesh (2000) Fundamentals of Cartography, Concept Publishing Company, New Delhi.
- 2 Robinson, Elements of Cartography, John Willy and Sons, New Delhi.
- 3 Keates J. S (1973) Cartographic Design and Production, Publisher Longman Inc. London
- 4 Raiz , (1962) Principles of Cartography – Publisher Mc. Graw Hill – London.
- 5 Sethurakkai, S, (2005) Pvipadaviyal: an Introduction, Shanmugam Publishing House, Madurai.

CHAIRMAN –BOS

COE

Sl. No.: 1433

Subject Code:

U11GE4A3

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.Sc., - GEOGRAPHY – IV - SEMESTER – SECOND ALLIED COURSE - III

(For the candidates admitted from 2011-12 onwards)

CARTOGRAPHY – III

- Unit- I** Map Design and Layout – Map Design – Principles and Constraints – Formats of Map.
- Unit- II** Lettering: Style, form, size – Mechanics of lettering – positioning of letters.
- Unit-III** Map Reproduction: Duplicating – Printing processes.
- Unit-IV** Aerial Remote sensing: Aerial photo – types, Satellite Remote sensing: Mechanisms – types – uses - applications.
- Unit-V** Computer applications in cartography: CAD, GIS TIN creation, Buffering, DEM, Overlay Analysis.

References

- 1 Misra R.P. and A.P.Ramesh (2000) Fundamentals of Cartography, Concept Publishing Company, New Delhi.
- 2 Robinson, Elements of Cartography, John Willy and Sons, New Delhi.
- 3 Keates J. S (1973) Cartographic Design and Production, Publisher Longman Inc. London
- 4 Raiz , (1962) Principles of Cartography – Publisher Mc. Graw Hill – London.
- 5 Sethurakkai, S, (2005) Pvipadaviyal: an Introduction, Shanmugam Publishing House, Madurai.

CHAIRMAN –BOS

COE

Sl. No.: 1434

Subject Code:

U11GE4S1

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.Sc., - GEOGRAPHY – IV - SEMESTER – SKILL BASED ELECTIVE - I

(For the candidates admitted from 2011-12 onwards)

GEOGRAPHY OF TOURSIM

Unit- I Scope and Content – Development – Types of Tourism – Their Importance

Unit- II Role of Accommodation and Hospitality in Tourism – Transport Facilities – Trade Fair, Sports and Games as Promotes of Tourism.

Unit-III Travel Agencies and their Functions, Passport and Visa.

Unit-IV Tourism Potential and Development in Tamil Nadu - Major Tourist Centers in Tamil Nadu.

Unit-V A General Study on Tourist Places of Chennai, Madurai, Ooty, Kodaikanal.

References:

1. Khan, M.A, (2005) introduction to tourism, Anmol Publication Pvt Ltd, New delhi.
2. Sangar, J.P., (2006) Tourism Management, Anmol Publication Pvt Ltd, New delhi.
3. Sharma, S.P., (2007) Tourism and Environment, Concepts, Principles and Approaches, Kanishka Publishes Distribution, New Delhi.

CHAIRMAN –BOS

COE

Sl. No.: 1435

Subject Code:

U11GE4N2

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.A., ENGLISH - IV SEMESTER – NON – CORE ELECTIVE – II

(For the candidates admitted from 2011-2012 onwards)

DISASTER MANAGEMENT - II

- Unit- I** Floods hazards – Effects of floods – Flood hazards in India – Management.
Cyclones – cyclone zones – Environment effects of cyclone.
- Unit- II**
- Unit-III** Sea-Surface earth quakes – Tsunami and its causes – Management aspects.
- Unit-IV** Mass Wasting and their effects – Mass wasting in India.
- Unit-V** Man-Induced hazards – Social response to hazards – Natural Disaster reduction and Management.

Reference

1. A Text book of Environmental Sciences S.S.Purohit., O.J .Sharamani and A.K.Agarwal.
2. Environmental Pollution(Tamil) P.Chandrasekaran.
3. Environmental Geography - Savindra Singh.
4. Introduction to Environmental Science-V.Anjaneyelu.
5. Environmental Problems and Solutions-B.K.Sharama, Kaur.

CHAIRMAN –BOS

COE

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR**B.Sc., GEOGRAPHY - V SEMESTER – CORE COURSE – VII**

(For the candidates admitted from 2011-2012 onwards)

HUMAN GEOGRAPHY

- Unit- I** Evolution of human geography- location, direction and distance-determinism and possibilism - foundation of modern geography, contribution of German, French and American schools.
- Unit - II** Population- patterns of world distribution growth – density of population-birthrate, death rate and population pyramid- problems of over population.
- Unit -III** Migration: Types, causes – migration related problems- population resources regions.
- Unit -IV** Settlement – rural: types- distribution – rural settlement in India. Urban settlement; site and situation – primate city, rank size rule- functional classification of towns – classification of cities.
- Unit -V** Human activities and its impacts on environment: Physical and Cultural environment – deforestation- use and abuse of water resources.

Reference

1. Peripillous A.V. Human Geography, Longman Group Limited, 1997
2. Chandra, R.C: A Geography of Population Concepts., determine and Patterns.
3. Singh., R.L. Readings in Rural Settlements and Land Use, Hutchinson, London, 1970.
4. Meyer, H.M and Kohn, C.F. Readings In Urban Geography Chicago Printing Press, Chicago.

Sl. No.: 1546

Subject Code:

U11GE5C8

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.Sc., GEOGRAPHY - V SEMESTER – CORE COURSE – VIII

(For the candidates admitted from 2011-2012 onwards)

GEOGRAPHY OF RESOURCES – I

- Unit-I** Resources – Definition – Types – Biotic and Abiotic – Potential and Developed Resources – Demand for Natural Resources.
- Unit-II** Agricultural Crops – Distribution and Production of Wheat - Cotton-Sugarcane – Tea – Coffee - Rubber.
- Unit-III** Livestock - Dairy Farming – Distribution and Characteristics – Fishing Factors – Distribution and Production.
- Unit-IV** Power Resources: Distribution and Production of Coal – Thermal Power – Hydel Power – Atomic Power. Non Conventional Sources of Energy.
- Unit-V** Mineral Resources – Distribution and Production – Types, Metallic and Non Metallic Minerals – Iron Ore-Bauxite – Gold – Manganese – Silver.

References:

1. Peach W.N. and Costentin James A. World Resources and Industries, Harper & Row Publications-New York.
2. Koeacheng Leong and Morgen – Economic and Human Geography – Oxford University Press-New Delhi.
3. Clawson Marion(ed) Natural Resources and International Development, New York.
4. S.K. Sadhkhan (1994) Economic Geography An Appraisal of Resources.
5. K. Kanna & V.K. Gupta (1998) Economic and Commercial Geography.

CHAIRMAN –BOS

COE

Sl. No.: 1547

Subject Code:

U11GE5C9

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.Sc., GEOGRAPHY - V SEMESTER – CORE COURSE – IX

(For the candidates admitted from 2011-2012 onwards)

GEOGRAPHY OF INDIA

Unit- I India: Geographical location and extent – India as a sub-continent – Major physical division - Drainage systems, Climate – Controlling factors – Seasons.

Unit- II Soil: Types and distribution – Soil erosion and conservation – Natural Vegetation: Forest types and distribution – Forest products and uses.

Unit-III Agriculture: Problems and Prospects – Farming types – Green revolution – Food crops – Rice, Wheat - Commercial crops: Sugarcane, Cotton, Jute,- Plantation crops: Tea, Coffee and Rubber – sources of irrigation – Major Multipurpose river valley projects – Fisheries

Unit-IV Mineral resources – Iron ore, Manganese, Bauxite, Coal and Oil. Power – Hydel, Thermal and Atomic. Industries – Cotton Textiles, Iron and Steel, Shipbuilding and Automobiles.

Unit-V Population – Distribution and Density. Transport – Roadways – Railways – Waterways – Air ways - Trade: Volume and Heads.

References:

1. Sign, Gopal –Geography of India, Atmarani, New Delhi 1970.
2. Aranachalam.B Economic Geography of India-Bombay
3. Sharma-Economic and Commercial and Geography of India.
4. Singh. R.L(ed) India a Regional Geography -1971, NGSI, Varanasi – 5.

CHAIRMAN –BOS

COE

Sl. No.: 1548

Subject Code:

U11GE5E1

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.Sc., GEOGRAPHY - V SEMESTER – ELECTIVE COURSE – I

(For the candidates admitted from 2011-2012 onwards)

GEOGRAPHY OF TAMIL NADU

- Unit- I** Geographical Location – Administrative divisions – Relief features – Drainage system – Climate – Seasons – Vegetation – Forest – Types and distributions – Soils – Types and distribution.
- Unit- II** Agriculture: Cropping seasons – Problems and prospects. Major crops – Rice, Millets, Pulses, Groundnut, Cotton, Sugarcane, Tea, Coffee and Rubber.
- Unit-III** Sources of irrigation: Distribution of canals, Tanks, Wells and Others. Animal husbandry: Livestock, Dairy development, Poultry and Fisheries.
- Unit-IV** Mineral and Power Resources: Iron ore, Bauxite, Coal and others. Power resource: Thermal, Hydel, Atomic, Solar and Wind. Industries: Cotton, Sugarcane, Iron and Steel and Automobiles.
- Unit-V** Population – Distribution and Density – Transport – Roadways, Railways, Airways and Water ways. Trade – Inland and Foreign.

Reference:

1. V.Kumaraswamy, (2003) Geography of Tamil Nadu, Sakthi Publishing House, Kumbakonam
2. Tiwari and Ramesh (1985), Basic Resource Atlas of Tamil Nadu

CHAIRMAN –BOS

COE

Sl. No.: 1549

Subject Code:

U11GE5S2

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.Sc., GEOGRAPHY - V SEMESTER – SKILL BASED ELECTIVE – II

(For the candidates admitted from 2011-2012 onwards)

COMPUTER APPLICATIONS IN GEOGRAPHY

- Unit- I** Basics of computer- meaning, types and Generations of computers.
- Unit- II** Computer system: Hardware, software components- operating system.
- Unit-III** Data base management system (DBMS) – Meaning and types of database management systems.
- Unit-IV** Computer –file and records- formats- word processor -spread sheet – power point.
- Unit-V** Computer applications in geographical data: Environmental studies, Agriculture, Land use, urban and regional planning studies.

Reference:

1. Robinson. A. etal (1978), Elements of Cartography Willey, New York
2. Misra R.P. and A.Ramesh, Fundamentals of cartography, concept publications New Delhi
3. Monkhouse & Wilkinson, Map and Diagrams, B.I Publications Pvt. Lts.
4. Lillesand and Kiefer, Remote Sensing and image interpretation, John Wiley and sons, NewYork (1979)
5. S.Kumar. (2003) Basics of Remote sensing and GIS, Laxmi publications, New Delhi.

CHAIRMAN –BOS

COE

Sl. No.: 1550

Subject Code:

U11GE5S3

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.Sc., GEOGRAPHY - V SEMESTER – SKILL BASED ELECTIVE – III

(For the candidates admitted from 2011-2012 onwards)

DISASTER MANAGEMENT

- Unit- I** Disaster-Meaning and Concept-Types.
Planetary hazards: Terrestrial hazards- earthquake hazards-Hazardous effects of earthquake- Earthquake hazards in India-Methods of Relief Operation.
- Unit- II** Volcanic hazards: Hazardous effects of Volcanic eruptions-Environmental Impacts of Volcanic eruptions-Safeguarding procedure.
- Unit-III** Atmospheric or Exogenous hazards-Destruction by Tropical cyclone and Local storms-Floods-Droughts-Methods of protection against such odds.
- Unit-IV** Human- Induced hazards- Social response to hazards-Natural Disaster reduction and Management.

Reference

1. A Text book of Environmental Sciences S.S.Purohit., O.J .Sharamani and A.K.Agarwal.
2. Environmental Pollution(Tamil) P.Chandrasekaran.
3. Environmental Geography - Savindra Singh.
4. Introduction to Environmental Science-V.Anjaneyelu.
5. Environmental Problems and Solutions-B.K.Sharama, Kaur.

CHAIRMAN –BOS

COE

Sl. No.: 16P6

Subject Code:

U11GE6C10P

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.Sc., GEOGRAPHY - VI SEMESTER – CORE COURSE - X

(For the candidates admitted from 2011-2012 onwards)

REMOTE SENSING APPLICATION IN GEOGRAPHY – PRACTICAL - III

Unit- I Remote sensing – developments and significance – remote sensing system – platforms – sensors – spectral characteristics

Unit- II Study of Marginal Information in Topographic Sheets – Aerial Photographs – Satellite Images.

Unit-III Tracing and Interpretation of Air Photographs and Satellite Imagery – Physical Features – Land Use – Settlements and Transport network.

Unit-IV Using computers: Worksheet function- Drawing Diagram: Bar Line and Pie diagram.

Reference Books:

1. Dickinson, G.C (1979) Map and Airphotographys, Arnold Heinemann, London.
2. Lilles and T.M and R.N.Klefer (1987) – Remote Sensing and Image Interpretations – John Wiley and Sons, New York.
3. Robinson, A.H. Randale, D.S. Morrison, J.L. and P.C. Muchrcke (1984)- Elements of Cartography, John Wiley and Sons, New York.

CHAIRMAN –BOS

COE

Sl. No.: 16P7

Subject Code:

U11GE6C11P

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.Sc., GEOGRAPHY - VI SEMESTER – CORE COURSE - XI

(For the candidates admitted from 2011-2012 onwards)

MAP PROJECTIONS AND SURVEYING – PRACTICAL - IV

Unit- I Map Projection – General Principles Classifications – Identification – Choice of Projections.

Unit- II Construction, Properties, Limitations and Uses of:
Cylindrical: Simple, Equal area and Mercators Projections.
Construction Properties, Limitations and Uses of:
Conical: One Standard conic, Two Standard Conic, Bonne’s Polyconic and International Projections.

Unit-III Zenithal: Construction Properties, Limitations and Uses of:
Gnomonic, Stereographic Orthographic, Equidistant, Equal Area (Polar Cases Only)
Conventional: Sinusoidal, Mollweide’s (Normal Cases Only), Sinusoidal Interrupted and Mollweide Interrupted.

Unit-IV Surveying: Simple Exercises Using Chain -. Prismatic Compass - Plane Table - Dumpy Level - Indian Clinometers – GPS.

References:

1. Kellaway George.P. – Map Projections Methuen & Co., London.
2. Steers J.A.-Map Projections, University London Press, London.
3. R.L. Singh-Practical Geography-Kalyani Publishers, New Delhi.
4. Jayachandran.S-Practical Geography.

CHAIRMAN –BOS

COE

Sl. No.: 1633

Subject Code:

U11GE6C12

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.Sc., GEOGRAPHY - VI SEMESTER – CORE COURSE - XII

(For the candidates admitted from 2011-2012 onwards)

BASICS OF REMOTE SENSING AND GIS

- Unit- I** **Remote Sensing:** Meaning, Types – History and Development – Electromagnetic Energy – Radiation Principles – Electromagnetic Spectrum – Energy Interactions – Remote Sensing System.
- Unit- II** **Fundamentals of Aerial Remote Sensing:** Components of Aerial Camera, Types of Aerial Photographs, Marginal Information of Aerial Photographs, Elements of Photo Interpretation
- Unit-III** **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-IV** **Application of Remote Sensing in Geography:** Water Resources, Forest, Land Use, Agriculture, Natural Hazards – Mineral Exploration – Urban and Regional Planning.
- Unit-V** **Geographical Information System (GIS) –** Digital Data Analysis, Data Structure – Raster and Vector Data, Data Merging – Thematic Map Outputs, GIS and Global Positioning System: Significance and Application.

Reference Books:

1. Curran.P.J. Principles of Remote Sensing, English Language Book Society Longmans (1985).
2. Sabins Jr. Remote Sensing-Principles of Interpretations, Freeman & Co, Sanfrancico (1978).
3. Lillesand & Kiefer, Remote Sensing and Image Interpretation, John Wiley & Sons, New York (1979).

CHAIRMAN –BOS

COE

Sl. No.: 1634

Subject Code:

U11GE6C13

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.Sc., GEOGRAPHY - VI SEMESTER – CORE COURSE - XIII

(For the candidates admitted from 2011-2012 onwards)

GEOGRAPHY OF RESOURCE – II

- Unit- I** Major Factors Associated With Resource Utilization – Industries and Manufacturing – Distribution of Iron and Steel Industries – Cotton Textiles – Sugar Industries.
- Unit- II** Distribution of Chemical – Aircraft – Machine Tools – Automobiles – Ship Building Industries.
- Unit-III** Industrial Development and Environmental Problems – Conservation and Importance of Exhaustible – Minerals Resources.
- Unit-IV** Transport System – Road – Rail – Air – Water Ways – Inland Water Ways and Ocean Routes.
- Unit-V** Trade – International Trade – Patterns – Balance of Trade – International Trading Organizational – Recent.

References:

1. John W. Alexander – Economic Geography – Prentice Hall of India – New Delhi.
2. Peach W.N. and Constantin James A. World Resource and Industries Harper & Row Publications – New Delhi.

CHAIRMAN –BOS

COE

Sl. No.: 1635

Subject Code:

U11GE6E2

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.Sc., GEOGRAPHY - VI SEMESTER – ELECTIVE COURSE -II

(For the candidates admitted from 2011-2012 onwards)

BIO GEOGRAPHY

- Unit- I** Definition, Scope and significance –basic ecological principles; Bio energy cycle in the Terrestrial Food chain-Darwin’s theory of evolution-Biomes
- Unit- II** Origin of fauna and flora –Plant and animal evolution through the geological times- distribution of Plant life on the earth and its relation to soil types, climate and human practices.
- Unit-III** Problems of extinctions of plant and animal life –conservation process-preventions, desertification, fresh water biology.
- Unit-IV** Major Biome – Equatorial biome –Tropical forest - Temperate grass land and Tropical Desert, Tropical grasslands.
- Unit-V** Study of Ecological regions of Himalayas and Western Ghats- Problems, Conservation and management measures.

References:

1. Robionson, H. Bio geography: ELBS: Mc Donald and Evana, London 1982.
2. Allce W.C and Schmidt, K.P. Ecological Animal Geography
3. Barry C: Bio geography-An Ecological and Evolutionary Approach, Cod Bloack Well, Oxford, 1977.
4. M.E. Hardy The Geography of Plants.
5. Peter A. Furley and Waleter W. Newey Geography of the Biosphere.

CHAIRMAN –BOS

COE

Sl. No.: 1636

Subject Code:

U11GE6E3

GOVERNMENT ARTS COLLEGE (AUTONOMOUS) KARUR

B.Sc., GEOGRAPHY - VI SEMESTER – ELECTIVE COURSE -III

(For the candidates admitted from 2011-2012 onwards)

URBAN AND REGIONAL PLANNING

- UNIT- I** Urban geography: scope and content-Trend of urbanization.
- UNIT- II** Urban centers: sites and situation-Urban morphology-functional classification- Towns- Satellite towns.
- UNIT-III** Hierarchy of urban centers- rank-size rule – central place theory - problems.
- UNIT-IV** Definition and types of Planning: Five year plans- annual plans in India.
- UNIT-V** Urban Planning-Role of urban centers in regional development-rural-urban relationship –Metropolitan centres : Delhi- Mumbai- Kolkata and Chennai. Problems: Landuse and Transport

Reference:

1. Northam.R.M(1975) Urban Geography, John Wiley and Sons New York.
2. Carter.H.(1972) The study of Urban Geography, Edward Arnold London.
3. Majid Hussain Urban Geography
4. Coh Cheng Leong Human and Economic Geography.

CHAIRMAN –BOS

COE