## CBCS: B.A/B.Sc(Hons) Geography

### Year-1

<table>
<thead>
<tr>
<th>Semester-I</th>
<th>Paper codes</th>
<th>Subjects</th>
<th>Marks</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core-1</td>
<td>GEOGC-1</td>
<td>Geomorphology</td>
<td>100</td>
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<tr>
<td>Core 2</td>
<td>GEOGC-2</td>
<td>Cartographic Techniques (Practical)</td>
<td>100</td>
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<tr>
<td>AECC-1</td>
<td>GEOGAEC-1</td>
<td>(English/M.I.L Communication)/Environmental Science</td>
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<tr>
<td>GE-1</td>
<td>GEOGGE-1</td>
<td>Rural Development/Other related discipline</td>
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### Year-2

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<th>Semester-II</th>
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<tr>
<td>Core-3</td>
<td>GEOGC-3</td>
<td>Climatology</td>
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<td>Core-4</td>
<td>GEOGC-4</td>
<td>Thematic Cartography (Practical)</td>
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<td>AECC-2</td>
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<td>GE-2</td>
<td>GEOGGE-2</td>
<td>Industrial Geography/Other related discipline</td>
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### Year-2

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<th>Semester-III</th>
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<td>Core-5</td>
<td>GEOGC-5</td>
<td>Environmental Geography</td>
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<tr>
<td>Core-6</td>
<td>GEOGC-6</td>
<td>Economic Geography</td>
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<tr>
<td>Core-7</td>
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<td>Field Work and Research Methodology (Practical)</td>
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<tr>
<td>SEC-1</td>
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<td>Advanced Spatial Statistical Technique</td>
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<tr>
<td>GE-3</td>
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<td>Geography of</td>
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<td>Semester-IV</td>
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<td>GE-4</td>
<td>GEOGGE-4</td>
<td>Disaster Management/Other related discipline</td>
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Year-3

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<th>Paper Codes</th>
<th>Subjects</th>
<th>Marks</th>
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<tbody>
<tr>
<td>Core-11</td>
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<td>Geography of India</td>
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<td>Core-12</td>
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<td>Remote Sensing and GIS (Practicals)</td>
<td>100</td>
<td>6</td>
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<td>DSE-1</td>
<td>GEOGDSE-1</td>
<td>Population Geography</td>
<td>100</td>
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<tr>
<td>DSE-2</td>
<td>GEOGDSE-2</td>
<td>Hydrology and Oceanography</td>
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<td>Semester-VI</td>
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<tr>
<td>Core-13</td>
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<td>Regional Planning and Development</td>
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<td>Geogc-14</td>
<td>Disaster Management based Project Work Practical</td>
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<td>DSE-3</td>
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<td>Resource Geography</td>
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<td>DSE-4</td>
<td>GEOGDSE-4</td>
<td>Project Report</td>
<td>100</td>
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</tr>
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</table>

Total: 400 marks, 24 credits

1-Cores-14 papers-Marks-1400-Credits-84
2-AECC-2 papers-Marks(50+50)100-Credits-4
3 GE 4 papers-Marks-400-Credits-24
4-SEC-2 papers-Marks-(50-50)100-Credits-4
5-DSE-3 papers-Marks-300-Credits-18
6-Project Report-1 paper-Marks-100-Credits-6

Total-26 papers-Marks-2400-Credits-140

Semester-I-4- papers-Marks-350-Credits-20
Semester-II-4 papers-Marks-350-Credits-20
Semester-III-5 papers-Marks-450-Credits-26
Semester-IV-5 papers-Marks-450-Credits-26
Semester-V-4-papers-Marks-400-Credits-24
Semester-VI-4-papers-Marks-400-Credits-24

Total- 26-papers-Marks-2400-Credits-140

CBCS- B.A/B.Sc (Hons) Syllabus
Year-I
Semester-I
Paper- 1GEOGC-1 Credits-6 Marks-100
Geomorphology
2. Earth: Interior Structure and Isostasy.
3. Earth Movements: Plate Tectonics, Types of Folds and Faults, Earthquakes and Volcanoes.
5. Evolution of Landforms: Fluvial (Waterfalls, Floodplains and Delta), Karst (Caverns and their Deposits), Aeolian (Blowouts and Sand-dunes), Glacial (Cirques and Moraines), and Coastal (Sea Cliffs and Beaches).

Paper- 2 GEOGC-2 Credits-6 Marks-100

Cartographic Techniques (Practical)
2. Scales – Concept and application; Graphical Construction of Plain, Comparative and Diagonal Scales.
4. Topographical Map – Interpretation of a Mountain area with the help of Cross and Longitudinal Profiles.
5. Slope Analysis – Wentworth’s method.
Practical Record: A Project File in pencil, comprising one exercise each on scale, map projection, interpretation of topographic sheet and slope analysis.

Paper- 3 GEOGAECC-1 Credits-2 Marks-50

(English/M.I.L Communication)/Environmental Science

Paper-4 GEOGGE-1 Credits-6 Marks-100

Rural Development/Other related discipline
2. Rural Economic Base: Agriculture and Allied Sectors, Seasonality and Need for Expanding Non-Farm Activities.
3. Area Based Approach to Rural Development: Drought Prone Area Programmes, PMGSY.
5. Provision of Services – Physical and Socio-Economic Access to Elementary Education and Primary Health Care and Micro credit.

Semester-II

Paper- 5 GEOGC-3 Credits-6 Marks-100
Climatology
1. Atmospheric Composition and Structure – Variation with Altitude, Latitude and Season.

Paper-6 GEOGC-4 Credits-6 Marks-100

Thematic Cartography (Practical)
1. Maps – Classification and Types; Principles of Map Design.
3. Thematic Mapping Techniques – Properties, Uses and Limitations; Areal Data – Choropleth, Dot, Proportional Circles; Point Data – Isopleths.
5. Thematic Maps – Preparation and Interpretation.
Practical Record: A Thematic Atlas with ink should be prepared on a specific theme with five plates of any state in India.

Paper-7 GEOGAECC-2 Credits-2 Marks-50

Environmental Science/(English/M.I.L Communication)

Paper-8 GEOGGE-2 Credits-6 Marks-100

Industrial Geography/Other related discipline
1. Nature, Scope and Subject Matter of Industrial Geography
2. Types, Geographical Characteristics and Location of Industries: Small and Medium Enterprises, Coal and Iron, Tertiary Industries, Rural based Industries
3. Mega Industrial Complexes: National Capital Region, Mumbai-Pune Industrial Region, Bengaluru-Tamil Nadu Industrial Region and Chota Nagpur Industrial Region
4. Impact of Industrialisation in India: Environmental; Social and Economic
5. Industrial Policy of India

Year-2

Semester-III

Paper-9 GEOGC-5 Credits-6 Marks-100

Environmental Geography
1. Environmental Geography – Concept and Scope
2. Human-Environment Relationships – Historical Progression, Adaptation
3. Ecosystem – Concept, Structure and Functions
4. Environmental Problems in Tropical, Temperate and Polar Ecosystems
5. Environmental Programmes and Policies – Global, National and Local levels

**Paper-10 GEOGC-6 Credits-6 Marks-100**

**Economic Geography**

1. Introduction: Concept and classification of economic activity
2. Factors Affecting location of Economic Activity with special reference to Agriculture, Industry and Services (Weber’s theory*)
3. Primary Activities: Subsistence and Commercial agriculture, forestry, fishing and mining.
4. Secondary Activities: Manufacturing (Cotton Textile, Iron and Steel), Concept of Manufacturing Regions, Special Economic Zones and Technology Parks.
* (theories relating to agriculture and services have been dealt in other papers)

**Paper-11 GEOGC-7 Credits-6 Marks-100**

**Field Work and Research Methodology (Practical)**

1. Field Work in Geographical Studies – Role, Value and Ethics of Field-Work
2. Defining the Field and Identifying the Case Study – Rural / Urban / Physical / Human / Environmental.
3. Field Techniques Merits, Demerits and Selection of the Appropriate Techniques (Observation, Interview with Special Focus on Focus Group Discussions, Satellite Image Interpretation, Constructing a Sketch)
4. Use of Field Tools – Collection of Material for Physical and Socio-Economic Surveys.
5. Designing the Field Report – Aims and Objectives, Methodology, Analysis, Interpretation and Writing the Report.

**Practical Record**

1. Each student will prepare an individual report based on primary and secondary data collected during field work.
2. The students / teachers can opt to take students in or outside the NCR, depending upon, problem to be studied.
3. The duration of the field work should not exceed 10 days.
4. The word count of the report should be about 8000 to 12,000 excluding figures, tables, photographs, maps, references and appendices.
5. One copy of the report on A4 size paper should be submitted in soft binding.

**Paper-12 GEOGSEC-1 Credits-2 Marks-50**

**Advanced Spatial Statistical Techniques**

1. Statistics and Statistical Data: Spatial and non-spatial; indices of inequality and disparity.
2. Probability theory, probability density functions with respect to Normal, Binomial and Poisson distributions and their geographical applications.
3. Sampling: Sampling plans for spatial and non-spatial data, sampling distributions; sampling estimates for large and small samples tests involving means and proportions.
4. Correlation and Regression Analysis: Rank order correlation and product moment correlation; linear regression, residuals from regression, and simple curvilinear regression; Introduction to multi-variate analysis.
5. Time Series Analysis: Time Series processes; Smoothing time series; Time series components.

Paper-13 GEOGGE-3 Credits-6 Marks-100

Geography of Tourism/Other related discipline
1. Scope and Nature: Concepts and Issues, Tourism, Recreation and Leisure Inter-Relations;
Geographical Parameters of Tourism by Robinson; Type of Tourism: Nature Tourism,
Cultural Tourism, Medical Tourism, Pilgrimage
2. Recent Trends of Tourism: International and Regional: Domestic (India); Eco-Tourism,
Sustainable Tourism, Meetings Incentives Conventions and Exhibitions (MICE)
3. Impact of Tourism: Economy; Environment; Society
4. Tourism in India: Tourism Infrastructure; Case Studies of Himalaya, Desert and Coastal Areas; National Tourism Policy

Semester-IV

Paper-14 GEOGC-8 Credits-6 Marks-100

Evolution of Geographical Thought:
1. Paradigms in Geography
3. Modern – Evolution of Geographical Thinking and Disciplinary Trends in Germany, France,
Britain, United States of America.
5. Trends – Quantitative Revolution and its Impact, Behaviouralism, Systems Approach,
Radicalism, Feminism; Towards Post Modernism – Changing Concept of Space in Geography, Future of Geography.

Paper-15 GEOGC-9 Credits-6 Marks-100

Statistical Methods in Geography
1. Use of Data in Geography: Geographical Data Matrix, Significance of Statistical Methods in Geography; Sources of Data, Scales of Measurement (Nominal, Ordinal, Interval, Ratio).
2. Tabulation and Descriptive Statistics: Frequencies (Deciles, Quartiles), Cross Tabulation,
Central Tendency (Mean, Median and Mode, Centrographic Techniques, Dispersion (Standard Deviation, Variance and Coefficient of Variation).
5. Association and Correlation: Rank Correlation, Product Moment Correlation, and Simple Regression,

**Paper-16 GEOGC-10 Credits-6 Marks-100**

**Human Geography**

2. Space and Society: Cultural Regions; Race; Religion and Language
3. Population: Population Growth and Demographic Transition Theory, Application in India;
5. Settlements: Types and Patterns of Rural Settlements; Types of Urban Settlements; Trends and Patterns of World Urbanization

**Paper-17 GEOGSEC-2 Credits-6 Marks-100**

**Research Methods (Practical)**

1. Geographic Enquiry: Definition and Ethics; Framing Research Questions, Objectives and Hypothesis; Literature Review; Preparing Sample Questionnaire
2. Data Collection: Type and Sources of Data; Methods of Collection; Input and Editing
3. Data Analysis: Qualitative Data Analysis; Quantitative Data Analysis; Data Representation Techniques
4. Structure of a Research Report: The Preliminaries; The Text; References and Citations

**Paper-18 GEOGGE-4 Credits-6 Marks-100**

**Disaster Management / Other related discipline**

1. Disasters: Definition and Concepts: Hazards, Disasters: Risk and Vulnerability: Classification
2. Disaster in India: (a) Flood: Causes, Impact, Distribution and Mapping: Landslide: Causes, Impact, Distribution and Mapping
3. Disaster in India: (b) Earthquake and Tsunami: Causes, Impact, Distribution and Mapping:
   Cyclone: Causes, Impact, Distribution and Mapping:
   Manmade disasters: Causes, Impact, Distribution and Mapping
4. Response and Mitigation to Disasters: Mitigation and Preparedness, NDMA and NIDM:
   Indigenous Knowledge and Community-Based
   Disaster Management; Do’s and Don’ts During Disasters.

**Year-3**

**Semester-V**

**Paper-19 GEOGC-11 Credits-6 Marks-100**

**Geography of India**

1. Physical: Physiographic Divisions, soil and vegetation, climate (characteristics and classification)
2. Population: Distribution and growth
3. Economic: Mineral and power resources distribution and utilisation of iron ore, coal, petroleum, gas; agricultural production and distribution of rice and wheat, industrial development: automobile and Information technology
4. Social: Distribution of population by race, caste, religion, language, tribes and their correlates

5. Regionalisation of India: Physiographic (Spate and R. L. Singh), Socio – cultural (Sopher and A. Ahmed), Economic (Sengupta).

Paper-20 GEOGC-12 Credits-6 Marks-100
Remote Sensing and GIS (Practical)
1. Remote Sensing and GIS: Definitionand Components, Development, Platforms and Types,
2. Aerial Photography and Satellite Remote Sensing: Principles, Types and Geometry of Aerial Photograph; Principles of Remote Sensing, EMR Interaction with Atmosphere and Earth Surface; Satellites (Landsat and IRS) and Sensors.
3. GIS Data Structures: Types (spatial and Non-spatial), Raster and Vector Data Structure
4. Image Processing (Digital and Manual) and Data Analysis: Pre-processing (Radiometric and Geometric Correction), Enhancement (Filtering); Classification (Supervised and Un-supervised); Geo-Referencing; Editing and Output; Overlays
5. Interpretation and Application of Remote Sensing and GIS: Land use/ Land Cover, Urban Sprawl Analysis; Forests Monitoring

Paper-21 GEOGDSE-1 Credits-6 Marks-100
Population Geography
4. Population Composition and Characteristics – Age-Sex Composition; Rural and Urban Composition; Literacy.
5. Contemporary Issues – Ageing of Population; Declining Sex Ratio; HIV/AIDS.

Paper-22 GEOGDSE-2 Credits-6 Marks-100
Hydrology and Oceanography
1. Hydrological Cycle: Systems approach in hydrology, human impact on the hydrological cycle, precipitation, interception, evaporation, evapo-transpiration, infiltration, ground-water, run off and over land flow; Hydrological input and output.
2. River Basin and Problems of Regional Hydrology: Characteristics of river basins, basin surface run-off, measurement of river discharge; floods and droughts.
4. Ocean Floor Topography and Oceanic Movements – Waves, Currents and Tides.
5. Ocean Salinity and Temperature Distribution and Determinants.

[Signature]
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Reader in Geography
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Semester-VI
Paper-23 GEOGC-13 Credits-6 Marks-100
Regional Planning and Development

1. Definition of Region, Evolution and Types of Regional planning: Formal, Functional, and Planning
Regions and Regional Planning; Need for Regional Planning; Types of regional Planning.
2. Choice of a Region for Planning: Characteristics of an Ideal Planning Region; Delineation of Planning
Region; Regionalization of India for Planning (Agro Ecological Zones)
3. Theories and Models for Regional Planning: Growth Pole Model of Perroux; Growth Centre Model in
Indian Context; Myrdal, Hirschman, Rostow and Friedmann; Village Cluster
4. Changing Concept of Development, Concept of underdevelopment; Efficiency-Equity Debate
5. Measuring development: Indicators (Economic, Social and Environmenta)l
6. Global Pattern of Development: inter-regional variations; Human development: International,
interstate comparison of India.

Paper-24 GEOGC-14 Credits-6 Marks-100
Disaster Management based Project Work (Practical)
The Project work Report based on any two field based case studies among following disasters and one
disaster preparedness plan of respective college or locality:
1. Flood
2. Drought
3. Cyclone
4. Earthquake
5. Landslides
6. Human Induced Disasters: Fire Hazards, Chemical Industrial accident

Paper-25 GEOGDSE-3 Credits-6 Marks-100
Urban Geography
1. Urban geography: Introduction, nature and scope; history of urbanisation
2. Patterns of Urbanisation in developed and developing countries
3. Functional classification of cities: Quantitative and Qualitative Methods
4. Urban Issues: problems of housing, slums, civic amenities (water and transport)
5. Case studies of Delhi, Mumbai, Kolkata and Chennai with reference to Urban Issues

Paper-26 GEOGDSE-4 Credits-6 Marks-100
Project Report
Introducing Research Component in Under-Graduate Courses

Project work/Dissertation is considered as a special course involving application of knowledge
in solving / analyzing /exploring a real life situation / difficult problem. A Project/Dissertation
work would be of 6 credits. A Project/Dissertation work may be given in lieu of a discipline
specific elective paper.

For papers withpractical:Theory-75 marks( Mid sem 15 +End sem 60),practical -25 (End sem)

There will be no mid semester exam for practical papers.
For papers with no practical: 100 marks paper=20( Mid sem)+ 80( End sem)

50 marks paper=10 (Mid sem)+ 40 (End sem)

Subjects with practical: Each of the 14 Core Courses, 4 Discipline Specific Elective Courses and 4 Generic Elective papers (100 marks each) will have minimum 40 theory classes of 1 hour duration and minimum of 10 tutorial classes (Normally practical classes at Hons level are of 2 hours duration each)

Subjects without practicals: Each of the 14 Core Courses, 4 Discipline Specific Elective Courses and 4 Generic Elective papers (100 marks each) will have minimum 50 theory classes of 1 hour duration and minimum 10 tutorial classes. Ability enhancement (compulsory) and 2 ability enhancement (skill based) papers will have minimum 20 classes each of one hour duration.

Core Course-C, Ability Enhancement Compulsory Course-AECC, Skill Enhancement Course-SEC

Discipline Specific Elective-DSE, Generic Elective-GE

[Signature]

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For papers with no practical: 100 marks paper=20(Mid sem)+ 80(End sem)

50 marks paper=10(Mid sem)+ 40(End sem)

Subjects with practical: Each of the 14 Core Courses, 4 Discipline Specific Elective Courses and 4 Generic Elective papers (100 marks each) will have minimum 40 theory classes of 1 hour duration and minimum of 10 tutorial classes (Normally practical classes at Hons level are of 2 hours duration each).

Subjects without practicals: Each of the 14 Core Courses, 4 Discipline Specific Elective Courses and 4 Generic Elective papers (100 marks each) will have minimum 50 theory classes of 1 hour duration and minimum 10 tutorial classes. Ability enhancement (compulsory) and 2 ability enhancement (skill based) papers will have minimum 20 classes each of one hour duration.

Core Course-C, Ability Enhancement Compulsory Course-AECC, Skill Enhancement Course-SEC

Discipline Specific Elective-DSE, Generic Elective-GE

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