

विद्वान् सर्वत्र पूज्यते

ರಾಣಿ ಚನ್ನಮ್ಮ ವಿಶ್ವವಿದ್ಯಾಲಯ
ವಿದ್ಯಾಸಂಗಮ, ರಾ.ಹೆ.-04
ಬೆಳಗಾವಿ-591156
ಕರ್ನಾಟಕ



RANI CHANNAMMA UNIVERSITY
Vidyasangama, NH-04
Belagavi-591156
Karnataka

**REVISED CURRICULUM FRAMEWORK FOR UNDER GRADUATE COURSE
STRUCTURE & SYLLABUS OF BACHELOR OF ARTS / SCIENCE**

RANI CHANNAMMA UNIVERSITY, BELAGAVI

B A / B.SC GEOGRAPHY

SYLLABUS

With effect from 2025 onwards

**DISCIPLINE SPECIFIC CORE COURSE(DSC) FOR SEM I-VI,
SKILL ENHANCEMENT COURSE (SEC) FOR SEM V/VI and
ELECTIVE COURSES FOR SEM V AND VI**

Board of Studies in Geography

Sl. No.	Name and Address	Designation
1	Prof.Vishwanath Avati Dean Science and technology and Chairman BOS Rani Channamma University Belagavi-591156	Chairman
2	Shri S .V.Munji Shri Jagadamba First Grade college,Hittinahalli tanda Vijayapura	Member
3	Dr.S.A.Patil Vishwabharati First Grade college Turanur	Member
4	Dr. Basavaraj. R. Bagade Co-Ordinator Department of Studies and Research in Geography, Rani Channamma University Belagavi-591156	Member

DEPARTMENT OF GEOGRAPHY

**B. A / B. Sc. Semester wise Geography Course Scheme under
Choice Based Credit System (CBCS) with Effect from 2024
Onwards**

Sem.	Title of the Paper	Paper Code	Teaching Hours/ Week	Duration of Exam	Evaluation Pattern			Credits
					IA	Sem. End Exam	Total	
I	<u>Theory Paper – 1.1</u> Principles of Geomorphology	DSC1.1	4	3	20	80	100	4
	<u>Practical – 1.2</u> Interpretation of SOI Toposheet	DSC- 1.2	4	4	10	40	50	2
II	<u>Theory Paper – 2.1</u> Fundamentals of Climatology	DSC- 2.1	4	3	20	80	100	4
	<u>Practical paper – 2.2</u> Interpretation and Analysis of IMD Weather Maps	DSC- 2.2	4	4	10	40	50	2
III	<u>Theory Paper - 3.1: Human Geography</u>	DSC-3.1	4	3	20	80	100	4
	<u>Practical paper – 3.2: Cartographic techniques</u>	DSC-3.2	4	3	10	40	50	2
	<u>Elective paper 3.3:- Disaster Management</u>	Elective	3	3	10	40	50	2
IV	<u>Theory Paper – 4.1: Regional geography of karnataka</u>	DSC-4.1	4	3	20	80	100	4
	<u>Practical paper – 4.2: MAP PROJECTIONS</u>	DSC-4.2	4	3	10	40	50	2
	<u>Skill enhancement course:-Basics of Cartography and Geospatial skills</u>	Skills	4	3	10	40	50	2
	<u>Elective:Geography of karnataka</u>	Elective	3	3	10	40	50	2
V	<u>Paper 5.1: Economic Geography</u>	DSC-5.1	4	3	20	80	100	4
	<u>PAPER5.2:Geographical Thought</u>	DSC-5.2	4	3	20	80	100	4
	<u>Practical paper 5.3: STATISTICAL METHODS IN GEOGRAPHY</u>	DSC-5.3	4	3	10	40	50	2
	<u>Skill enhancement course 5.4: BASIC QUANTITATIVE TECHNIQUES</u>	Skills	4	3	10	40	50	2
	<u>Theory Paper 6.1: Regional Geography of India</u>	DSC-6.1	4	3	20	80	100	4

VI	Theory Paper 6.2:- Geography of settlement	DSC-6.2	4	3	20	80	100	4
	Practical Paper 6.3: Geographical data analysis & Daigrams	DSC-6.3	4	3	10	40	50	2
	Skill enhancement course: -Project work & Viva	Skills	4	3	10	40	50	2

Note:

DSC: Discipline Specific Course Papers [All DSC Papers are Compulsory for I sem to VI sem]

REGULATION AND SCHEME OF INSTRUCTIONS

Regulations governing three-year Semesterized, Bachelor Degree Programmes of Rani Channamma University, Belagavi (framed under Section 44(1) (c) of the K.S.U. Act 2000) with effect from 2024 onwards.

I. Goals & Objectives:

The following aims have been kept in view while designing the syllabus of the Bachelor's Degree Programme (B.A/B.Sc.) in Geography as one of the optional subjects.

The aims are to enable students to:

- To bring the geographical awareness among the students.
- To provide fundamental spatial information on the earth's surface.
- To train and teach geography effectively at various levels in educational institutions.
- To train and provide information related to spatial and regional levels of planning.
- To organize professional tours every year to cultivate research culture among the students.
- To provide adequate geographic knowledge and skills as needed for the competitive examination.

II. Admission Criteria:

A candidate who has passed PUC-II year/10+2/Three Diploma is eligible to choose Geography as one of the optional subjects in Under Graduate Course. The candidate should have obtained at least 40 per cent of aggregate marks. Relaxation in respect of SC/ST etc., will be followed as per the prevailing rules of the University. Other rules for admissions are as per the University notification from time to time.

III. Medium of Instruction:

The medium of instruction shall be English, however, the students are allowed to write the examination in Kannada Medium also.

IV. Attendance:

A minimum 75% of attendance in each semester (both theory and practical) is compulsory.

V. Scheme of Instruction:

1. The M. A/M. Sc Master's Degree holders in Geography only teach the subject at UG Level. However, NET/SLET/Ph.D. is necessary.
2. Geography as an optional subject at Under Graduate (UG) Level, which consists of six semesters, it includes eight theory papers (DSC) and eight practical papers (DSC). There will be **one theory** paper and **one practical** paper in each semester **i.e. I and II** semesters, with each paper theory **100 and practical 50 marks** respectively. The

duration of teaching hours for the theory and practical paper will be together ***Eight (04+04) hours per week*** for the **I** and **II** semesters. Each theory and practical paper will have 5 modules/units (divided into chapters/units). The duration of each semester is being 16 weeks excluding the examination period.

3. The Practical classes are to be conducted in separate batches. Each batch consists of 15 students with one teacher.

VI. Scheme of Theory Examinations:

1. The Theory course shall carry 100 marks of which 80 marks allotted for the semester-end examination and 20 marks for internal assessment (IA) that will be carried out as per the University norms.
2. Each theory course will have a question paper of 3 hours duration and a maximum of 80 marks. The minimum mark to pass in each paper on theory is 40 per cent.
3. There shall be three sections in every theory question paper viz. A. B. & C. **Section A** shall have 12 questions of each 2 marks and the candidate must attempt 10 questions only (10X2=20 marks). **Section B** shall have 8 questions of each 5 marks and the candidate must attempt 6 questions only (6X5=30 marks). **Section C** shall have 6 questions of each 10 marks and the candidate attempt 3 questions (3X10=30 marks).

VII. Scheme of Practical Examination:

1. Each practical course shall carry 50 marks of which **10 marks** are allotted for IA marks (out of which **06 marks** are kept for practical records journals/ assignments/dissertations and **04 marks** are allotted for attendance and lab work). The **40 marks** examination will be conducted at the end of each semester, out of which **5 marks** will be allotted for viva and **35 marks** for written examination as per the instructions given by the University.
2. Each practical course will have a question paper of 4 hours duration and a maximum of 40 marks.
3. The practical examination is to be conducted in batches and each batch consists of a minimum of 15 candidates.
4. There will be one internal examiner and one external examiner to conduct the practical examination for each batch in each semester.
5. Minimum marks to pass in each paper of practical are 40 per cent.
6. Each candidate shall complete the laboratory work of the journal/practical records, it shall be certified and signed by both the concerned course teacher and the Head of the Department of Geography of the concerned college compulsory to certify that the candidate has satisfactorily completed the prescribed course in practical and same should be produced at the time of practical examination. No students shall be allowed for the examination without completed journal / practical records.
7. There is no provision for revaluation or seeking improvement in practical paper examination and internal assessment marks.

B. A. /B. Sc. SYLLABUS IN GEOGRAPHY

Ist SEMESTER - THEORY PAPER- 1.1: PRINCIPLES OF GEOMORPHOLOGY

Type of Course	Theory/ Practical	Credits	Instruction hour per week	Total no of Lectures/Hours /Semester	Duration of Exam	Formative assessment marks	Summative assessment marks	Total marks
DSC	Theory	04	04	60 hrs	3hrs	20	80	100

Objectives: The objective of the course is to familiarize the students with the need to understand of geomorphology about certain fundamental concepts, focusing on the unity of Geomorphology in the earth's materials and the processes with or without an element of time. The process of component of Geomorphology is segmented into the internal and external processes of landscape evolution.

Units	Topic	Teaching Hours
I	Introduction to Geomorphology: Meaning and definition, nature and scope significance and Modern Techniques in Geomorphology.	04
II	Earth's Interior and Tectonics: Interior Structure of the Earth- Core, mantle, crust, and their compositions Earth Movements- Orogenic Movements-Mountain-building processes. Epeirogenic Movements- Continental uplift and subsidence. Tectonic Features- Faults and Folds, Types, formation processes, and related landforms. Seismic Waves- Types, propagation. Isostasy- Concepts and theories of isostatic adjustment.	10
III	Theories and Rock Cycles: Wegener's Theory of Continental Drift Evidence and Implications. Plate Tectonic Theory-Mechanisms of plate movements, boundaries, and resultant landforms. Weathering- Physical, chemical, and biological weathering processes. Rocks- Origin and Types, Igneous, sedimentary, and metamorphic rocks. Distribution and Economic Significance- Global distribution patterns and their importance. Rock Cycle-Processes and transitions among rock types. Geomorphological Mapping-Techniques and importance of geomorphological maps.	12
IV	Endogenic and Exogenic Forces; Endogenetic Forces-Internal processes shaping the Earth's surface. Earthquakes-Causes, effects, distribution, and specific case studies of earthquakes in India. Volcanoes-Types, causes, effects, and distribution. Exogenetic Forces- External processes affecting the Earth's surface. Erosion and Weathering-Processes, factors, and resultant landforms. Mass Wasting:-Types and processes. Tsunamis- Causes, effects, and mitigation measures. Geological Time Scale-Understanding the major events in Earth's history.	12

V	Denudation and Work of Agents: Meaning and Process of Denudation. Agents of Denudation- Rivers- Fluvial processes, landforms, river terraces, and drainage patterns. Wind- Aeolian processes, desert landforms, and dune dynamics. Glaciers- Glacial processes, landforms, and impacts of glaciation. Underground Water-Karst topography, landforms, and speleogenesis. Ocean/Sea Waves- Coastal processes, landforms, and coastal erosion. Human Impact on Geomorphological Processes- Anthropogenic activities and their effects on geomorphology.	14
	Total	52 hours
Assignment	a) Students should visit nearby localities and observe the types and characteristics of Landforms and submit a brief report by analyzing their characteristics and formation processes. . b) Collect various types of rocks found near your native place, documenting their geological significance. c) Make a report on seismic events in India, evaluate damages, and propose measures for earthquake preparedness.	

Reference:

1. Dayal, P. (1996): A Text book of Geomorphology. Shukla Book depot, Patna
2. Dury, G.H. (1980): The Face of the Earth, Penguins
3. Ernst, W.G.(2000): Earth systems - Process and Issues. Cambridge University Press
4. ICSSR (1983): A Survey of Research in Physical Geography. Concept, New Delhi
5. Kale V. and Gupta, A. (2001): Element of Geomorphology, Oxford University Press, Calcutta
6. Monkhouse, F.J.(1960): Principles of Physical Geography. Hodder and Stoughton, London.
7. Pitty. A.(1974): Introduction to Geomorphology, Methuen, London
8. Sharma, H.S.(1987): Tropical Geomorphology, Concept, New Delhi
9. Singh,S. (1998): Geomorphology, Prayag Pustakalaya, Allahabad
10. Small, R.J.(1985): The Study of Landforms, Mc.Graw Hill, New York

Formative Assessment for theory	
Assessment Occasion/Type	Marks
Internal Assessment Test 1	05
Internal Assessment Test 1	05
Assignment	10
Total	20 Marks
Formative Assessment as per guidelines.	



Vidhyasangama'

B. A. /B. Sc. SYLLABUS IN GEOGRAPHY**1st SEMESTER PRACTICAL- I****PAPER – 1.2 INTERPRETATION OF SOI TOPOSHEETS**

Type of Course	Theory/ Practical	Credits	Instruction hour per week	Total no of Lectures/Hours /Semester	Duration of Exam	Formative assessment marks	Summative assessment marks	Total marks
DSC	Practical	02	04	56 hrs	3hrs	10	40	50

Units	Topic	Teaching Hours
I	Meaning and Types of Maps: Importance of SOI Topographical Maps, Interpretation of colour tints and conventional symbols used on a topographical survey of India map.	04
II	The Grid Reference- Locating features with the help of a four-figure and a six-figure grid reference. Identification of simple landforms marked by contours (steep slope, gentle slope, hill, valley, ridge/water divide, escarpment), triangulated height, spot height, benchmark, and relative height/ depth. Identification and definition of types of scale given on the map. Measuring distances and calculating area using the scale given therein. Marking directions between different locations, using eight cardinal points. Identification of drainage (direction of flow and pattern) and settlement patterns. Cross Section with the calculation of Vertical Exaggeration.	18
III	Interpretation of SOI Toposheets with reference to Physical Features: a) Relief b) Drainage system c) Natural Vegetation	14
IV	Interpretation of SOI Toposheets with reference to Cultural Features: a) Settlement and its patterns b) Transportation and Communication c) Agriculture and Irrigation	12
V	Viva	
	Total	48 hours

Reference:

1. R. L. Singh: Elements of Practical Geography
2. Gopal Singh: Map Work & Practical Geography
3. Dr. Ranganath: Practical Geography (Kannada)
4. Singh and Kanayia: Practical Geography
5. D. R. Khullar: Essentials of Practical Geography
6. Robinson. H: Elements of Practical Geography
7. Pijushkanti Saha and Partha Basu- Advanced Practical Geography
8. <https://www.surveyofindia.gov.in/pages/educational-map-series>

Formative Assessment for theory	
Assessment Occasion/Type	Marks
Internal Assessment Test 1	05
Internal Assessment Test 1	05
Total	10 Marks
Formative Assessment as per guidelines.	

'Vidhyasangama'

B. A. /B. Sc. SYLLABUS IN GEOGRAPHY
IInd SEMESTER THEORY PAPER – 2.1 FUNDAMENTALS OF CLIMATOLOGY

Objectives: This course aims to provide an understanding of weather and climate phenomena, the dynamics of global climates, and the interaction between living organisms with climate and physical environment.

Type of Course	Theory/ Practical	Credits	Instruction hour per week	Total no of Lectures/Hours /Semester	Duration of Exam	Formative assessment marks	Summative assessment marks	Total marks
DSC	Theory	04	04	60 hrs	3hrs	20	80	100

Units	Topic	Teaching Hours
I	Introduction to Climatology: Definition and Nature-Understanding Climatology. Scope and Significance- Importance of Climatology in environmental and societal contexts. Weather vs. Climate- Distinctions and interrelationships. Elements of Weather and Climate-Temperature, humidity, precipitation, wind, pressure. Controlling Factors-Latitude, altitude, distance from the sea, ocean currents, topography.	06
II	Structure and Composition of the Atmosphere: Atmosphere Structure-Layers of the atmosphere - Troposphere, Stratosphere, Mesosphere, Thermosphere, Exosphere. Atmospheric Composition- Gases, particulates, and their significance. Atmospheric Temperature-Heat Balance (Budget). Factors Influencing Temperature Distribution- Latitude, altitude, land-water contrast, ocean currents, and seasonal variations. Temperature Distribution- Vertical, horizontal, and inversion of temperature. Isothermal Maps-Understanding and interpreting temperature patterns.	12
III	Atmospheric Pressure and Winds: Atmospheric Pressure - Measurement of Pressure- Barometers and other instruments. World Pressure Belts- Isobaric Maps, Understanding and interpreting pressure patterns. World wind belts-- Planetary Winds, Trade winds, westerlies, and polar easterlies. Seasonal Winds- Monsoons, mechanism and impact. Local Winds-Land and sea breezes, mountain and valley winds. Jet Streams-Characteristics, formation, and effects on weather. Air Masses and Fronts-- Definition and Nature, Characteristics of air masses. Source Regions and Classification-Continental and maritime, polar and tropical air masses. Fronts-Types of fronts - warm, cold, occluded, and stationary fronts.	12

IV	Atmospheric Disturbances: Cyclones and Anticyclones- Characteristics and Mechanisms, Formation, structure, and impact. Distribution- Global patterns and regional variations. Tropical Cyclones-Characteristics, stages, and effects. Temperate Cyclones-Formation, stages, and impacts. Climate Change and Cyclones Impact of global warming on cyclone patterns and intensity.	12
	Atmospheric Moisture and Precipitation: Hydrological Cycle- Processes and significance. Humidity- Measurement and Types, Absolute, relative, and specific humidity.	10
V	Factors Influencing Humidity-Temperature, air movement, and proximity to water bodies. Clouds- Formation and Types: Cirrus, cumulus, stratus, nimbus, and their subtypes. Condensation- Processes leading to dew, frost, fog, and clouds. Types of Rainfall-- Convectional, Orographic, and Cyclonic Rainfall: Mechanisms and examples. Global Distribution- Patterns and influencing factors.	
Total		52 hours

Assignment	<p>a) Explore urban heat island effects in your area by observing temperature differences in built-up areas, green spaces, and water bodies. Present findings in a report with recommendations for mitigation</p> <p>b) Prepare a detailed report on on climate change effects on ecosystems and species distribution, with case studies illustrating ecological consequences and adaptation strategies.</p> <p>c) Prepare a report on climate change effects on ecosystems and species distribution, with case studies illustrating ecological consequences and adaptation strategies.</p> <p>d) Research and report on climate change effects on ecosystems and species distribution, with case studies illustrating ecological consequences and adaptation strategies.</p>
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Reference:

1. Savindra Singh: Physical Geography
2. Strahler & Strahler: Physical Geography
3. R. N. Tikka: Physical Geography
4. Majid Hussain: Physical Geography
5. Das Gupta & Kapoor: Physical Geography
6. Triwartha. G. T: An Introduction to Climate
7. Savindra Singh: Climatology

Formative Assessment for theory	
Assessment Occasion/Type	Marks
Internal Assessment Test 1	05
Internal Assessment Test 1	05
Assignment	10
Total	20 Marks
Formative Assessment as per guidelines.	

B. A. /B. Sc. SYLLABUS IN GEOGRAPHY

IInd SEMESTER PRACTICAL- I

PAPER – 2.2 INTERPRETATION OF IMD WEATHER MAPS

Type of Course	Theory/ Practical	Credits	Instruction hour per week	Total no of Lectures/Hours /Semester	Duration of Exam	Formative assessment marks	Summative assessment marks	Total marks
DSC	Practical	02	04	56 hrs	3hrs	10	40	50

Units	Topic	Teaching Hours
I	Introduction to IMD Weather Maps: Meaning, Understanding the significance of IMD weather maps in meteorological analysis and forecasting for various sectors including agriculture, transportation, and disaster management. Types of Weather Maps- Introduction to synoptic weather maps, satellite imagery, and radar data used by the India Meteorological Department (IMD). and Significance of IMD Weather maps	09
II	Weather Instruments and Measurement: Detailed study of the working principles and usage of common weather instruments used in meteorological observations. In-depth understanding of thermometers (Fahrenheit, Centigrade, Six's maximum and minimum), wet and dry bulb thermometer, mercurial and aneroid barometers, rain gauge, and wind vane.	12
III	Indian Daily Weather Report: Weather signs and symbols Interpretation of weather signs and symbols used in IMD weather reports and forecasts, including cloud types, wind direction, and atmospheric pressure. Station model- Comprehensive understanding of the components and layout of the station model used for representing weather observations in synoptic charts. General Information of IMD Weather Maps-Familiarization with the format, content, and updates of the Indian Daily Weather Report issued by IMD.	12
IV	Interpretation of Indian Weather Maps: Seasonal Weather Patterns- Analysis of weather maps for different seasons, focusing on temperature, pressure systems, wind patterns, and precipitation. (One map for each season). Spatial and Temporal Variability- Understanding spatial variations and temporal changes in weather conditions depicted on IMD weather maps.	15
V	Viva	
	TOTAL	48 Hours

Reference:

1. R. L. Singh: Elements of Practical Geography
2. Gopal Singh: Practical Geography
3. Dr. Ranganat: Practical Geography (Kannada Version)
4. Singh and Kanoj: Practical Geography
5. R. P. Misra and Ramesh: Fundamental of Cartography
6. M. F. Karenavar & S. S. Nanjannavar: Practical Geography
7. M .F. Karenavar & S. S. Nanjannavar: Practical Geography (Kannada Version)
8. Pijushkanti Saha & Partha Basu: Advanced Practical Geography
9. <https://mausam.imd.gov.in/>

Formative Assessment for theory	
Assessment Occasion/Type	Marks
Internal Assessment Test 1	05
Internal Assessment Test 1	05
Total	10 Marks
Formative Assessment as per guidelines.	



RANI CHANNAMMA UNIVERSITY, BELAGAVI

B. A. /B. Sc. SEP-2024 SYLLABUS IN GEOGRAPHY

IIIrd SEMESTER -THEORY PAPER - 3.1: HUMAN GEOGRAPHY

(w. e. f. 2025-26 and onwards)

Objectives: To understand the nature of man- environment relationship and human capability to adopt and modify the environment under its varied conditions from primitive life style to the modern living; to identify and understand environment and population in terms of their quality and spatial distribution pattern and to comprehend the contemporary issues facing the global community.

Type of Course	Theory/ Practical	Credits	Instruction hour per week	Total no of Lectures/Hours /Semester	Duration of Exam	Formative assessment marks	Summative assessment marks	Total marks
DSC	Theory	04	04	60 hrs	3hrs	20	80	100

Units	Title	Teaching Hours
1	<p>Introduction to Human Geography:</p> <p>1.1. Definition, Nature, Scope and Significance of Human Geography</p> <p>1.2. Basic Concepts, Recent Trends and Branches Human Geography.</p> <p>1.3. Man and Environment Relationship.</p> <p>1.4. Schools of Human Geography: Environmental Determinism, Possibilism, Neo-determinism (stop-and-go determinism).</p> <p>1.5. Quantitative Revolution and Locational Analysis in Geography.</p> <p>1.6. Approaches in Human Geography: Descriptive Approach, Regional Approach, Areal Differentiation Approach, Spatial Organization Approach and Behavioral Approaches.</p>	12
2	<p>Races, Mosaic of Culture and Religions of Mankind:</p> <p>2.1. Races: Evolution of Man, Bases for Classification, Broad Racial Groups of the World and their Physical Traits and Distribution.</p> <p>2.2. Culture: Concept and types of Culture, Cultural Traits and Complexes, Major Cultural Realms of the World.</p> <p>2.3. Religions: Major Religions and their Distribution: Hinduism, Christianity, Islam and Buddhism.</p> <p>2.4. Assignment: Students will have to select nearby area and study religions and their characteristics and submit the report.</p>	10

<p>3</p>	<p>Impact of Environment on the Mode of Life on the First People: 3.1. Economic Activities of Man: Importance and Types of Activities. 3.2. First Peoples: Mode of Life of Primitive Population Groups of the World mainly Pygmies, Eskimos, Bushman, Kirghizs, Sakais and Semangs. 3.3. Tribal Groups of India: Mode of Life of Todas, Gonds, Santals, Bhills and Nagas. 3.4. Field Study: Selecting region, Students have to examine the economic activities of man and his environment, prepare a report and submit.</p>	<p>10</p>
<p>4</p>	<p>Settlements and Transportation and Communication: 4.1. Rural Settlements: Origin and Evolution, Types, Factors influencing on distribution of Rural Settlements, Patterns and Functions of Rural Settlements. 4.2. Urban Settlements: Origin and Evolution, Hierarchy, Patterns of Urban Settlements. Urban Morphology. Concept of Primate City. Functional Classification of Towns, Rural-Urban Fringe and Continuum, Urbanization: Meaning, Trends of Urbanization of World, Problems and Remedies of Urbanization of World. 4.3. Transportation and Communication: Significance, Growth, Types and Development of Road, Railway, Airways and Waterways. Communication services and its impact in regional development. 4.4. Field Study: Students have to study the expansion of rural and urban settlements in local area and prepare a report or study the morphology of the town/city/mega city and prepare a report.</p>	<p>10</p>
<p>5</p>	<p>World Population: 5.1. Theories of Population: Malthusian Theory and Demographic Transition Theory. 5.2. Population: Growth, Trend and Distribution of World Population. 5.3. Components of Population; Fertility, Mortality, Age and Sex Structure and Literacy rates of World Population. 5.4. Migration: Meaning and Types of Migration, Causes (Push and Pull factors), Consequences and Laws of Migration. 5.5. Human Development Index: Meaning, Social Well Being and Quality of Life, Human Development Index (HDI) and Sustainable Development Goals (SDGs).</p>	<p>10</p>
<p>Total Teaching Hours</p>		<p>52</p>

References:

1. Majid Hussain (2022): Human Geography, Rawat Publications, Jaipur.
2. Peter Haggett (1882): Locational Analysis in Human Geography
3. Dickens and Pitts (1976): Introduction to Human Geography,
4. Davis K. (1992): Man & Earth
5. Ranganath (2020): Principles of Human Geography (Kannada)
6. P. Mallappa (2020): Human Geography (Kannada)
7. M. B. Goudar (2019): Human Geography (Kannada)
8. S. S. Nanjannavar (2020): Human Geography (Kannada)

Websites:

1. <https://www.resourcedata.org/dataset/rgi-ministry-of-minerals-energy-and-water-resources>
2. <https://www.indiaculture.nic.in/>
3. <https://dpiit.gov.in/>
4. <https://www.mines.gov.in/>
5. <https://censusindia.gov.in/census.website/>

Formative Assessment for theory	
Assessment Occasion/Type	Marks
Internal Assessment Test 1	05
Internal Assessment Test 1	05
Assignment	10
Total	20 Marks
Formative Assessment as per guidelines.	



RANI CHANNAMMA UNIVERSITY

B. A. /B. Sc. SEP-2024 SYLLABUS IN GEOGRAPHY

IIIrd SEMESTER PRACTICAL PAPER – 3.2: CARTOGRAPHIC TECHNIQUES

(w. e. f. 2025-26 and onwards)

Type of Course	Theory/ Practical	Credits	Instruction hour per week	Total no of Lectures/Hours /Semester	Duration of Exam	Formative assessment marks	Summative assessment marks	Total marks
DSC	Practical	02	04	56 hrs	3hrs	10	40	50

Units	Topic	Teaching Hours
1	Maps Maps: Definitions, Types, Elements and Uses of Maps and its significance in Geographical Studies. Latitudes and Longitudes. Enlargement and Reduction of Maps.	12
2	Scales Scales: Meaning, Types of Scales: Verbal/Statement (VS), Representative Fraction (RF) and Graphical Scales. Application and Reading of Distances on a Map with the help of Scale.	12
3	Conversion of Scales Conversion of Scales: VS into RF and RF into VS (Minimum 10 examples each).	12
4	Contraction of Scales Construction of Graphical Scales, Comparative Scales, Pace Scales, Time Scale and Diagonal Scales (Minimum 2 examples each)	12
	Total Teaching Hours	48

References:

1. Mishra R.N. and Sharma P. K. (2023): Practical Geography, Methods and Techniques, Prateek Publications Jaipur.
2. Mishra R.P. and Ramesh A. (1989): Fundamentals of Cartography, Concept Publishing.
3. Singh, R.L. (2005): Elements of Practical Geography. Kalyani Publishers, New Delhi. India.
4. Singh, G. (2005): Map Work & Practical Geography. Vikas Publishing House Pvt. Ltd., Delhi
5. Siddhartha, K. (2006): Geography through maps, Kosalaya Publications Pvt. Ltd, Delhi
6. S. S. Nanjannavar (2020): Practical Geography Prabu Publication, Dharwad.

Formative Assessment for theory	
Assessment Occasion/Type	Marks
Internal Assessment Test 1	05
Internal Assessment Test 1	05
Total	10 Marks
Formative Assessment as per guidelines.	



RANI CHANNAMMA UNIVERSITY
B. A. /B. Sc. SEP-2024 SYLLABUS IN GEOGRAPHY

Disaster Management

BA/B.Sc-III Semester Elective

Marks : 50

Periods : 48

Type of Course	Theory/ Practical	Credits	Instruction hour per week	Total no of Lectures/Hours /Semester	Duration of Exam	Formative assessment marks	Summative assessment marks	Total marks
ELECTIVE	Theory	02	03	48	3hrs	10	40	50

1. Hazards, Risk, Vulnerability and Disasters: Definition and Concepts.
2. Disasters in India: (a) Causes, Impact, Distribution and Mapping: Flood, Landslide, Drought.
3. Disasters in India: (b) Causes, Impact, Distribution and Mapping: Earthquake, Tsunami and Cyclone.
4. Human induced disasters: Causes, Impact, Distribution and Mapping.
5. 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 Reading List
1. Government of India. (1997) Vulnerability Atlas of India. New Delhi, Building Materials & Technology Promotion Council, Ministry of Urban Development, Government of India.
2. Kapur, A. (2010) Vulnerable India: A Geographical Study of Disasters, Sage Publication, New Delhi.
3. Modh, S. (2010) Managing Natural Disaster: Hydrological, Marine and Geological Disasters, Macmillan, Delhi.
4. Singh, R.B. (2005) Risk Assessment and Vulnerability Analysis, IGNOU, New Delhi. Chapter 1, 2 and 3
5. Singh, R. B. (ed.), (2006) Natural Hazards and Disaster Management: Vulnerability and Mitigation, Rawat Publications, New Delhi.
6. Sinha, A. (2001). Disaster Management: Lessons Drawn and Strategies for Future, New United Press, New Delhi.
7. Stoltman, J.P. et al. (2004) International Perspectives on Natural Disasters, Kluwer Academic Publications. Dordrecht. 8. Singh Jagbir (2007) "Disaster Management Future Challenges and Opportunities", 2007. Publisher- I.K. International Pvt. Ltd. S-25, Green Park Extension, Uphaar Cinema Market, New Delhi, India (www.ikbooks.com).



RANI CHANNAMMA UNIVERSITY, BELAGAVI

B. A. /B. Sc. SEP-2024 SYLLABUS IN GEOGRAPHY

IVth SEMESTER THEORY PAPER – 4.1: REGIONAL GEOGRAPHY OF KARNATAKA

(w. e. f. 2025-26 and onwards)

Objectives: To understand the Karnataka state in terms of various physical structures, their prime appearances and intra-regional disparities in water resources, agriculture realm, various resources and industries and to analyze natural and human resource endowments and their conservation and management. The main purpose of this paper is to gain knowledge and understand regional strength of the state and to motivate the students for competitive exams.

Course Structure: One Theory and One Practical **Teaching**

Type of Course	Theory/ Practical	Credits	Instruction hour per week	Total no of Lectures/Hours /Semester	Duration of Exam	Formative assessment marks	Summative assessment marks	Total marks
DSC	Theory	04	04	60 hrs	3hrs	20	80	100

Units	Topic	Teaching Hours
1	<p>Physical Setting:</p> <p>1.7. Location, Size and Extent, Major Physiographic Regions and their Characteristics of Karnataka.</p> <p>1.8. Drainage System of Karnataka.</p> <p>1.9. Climate: Seasonal Weather Characteristics, Climatic Zones. Mechanism and Characteristics of Indian Monsoons.</p> <p>1.10. Soils: Types, Pollution and Conservation in Karnataka.</p> <p>1.11. Natural Vegetation in Karnataka.</p>	12
2	<p>Water Resources and Agricultural Realm:</p> <p>2.5. Irrigation: Sources and Types of Irrigation, Issues and Challenges and Regional Distribution.</p> <p>2.6. River Projects: Krishna, Cauvery and Tungabhadra.</p> <p>2.7. National Water Policies and Jalashakti Abhiyana.</p> <p>2.8. Agriculture: Meaning and Concepts, Land Use and Cropping Patten in Karnataka, Agro-Climatic Regions, Concept of Green Revolution, White Revolution and Blue Revolution.</p> <p>2.9. Importance, Geographical Conditions, Cultivation, Production and Distribution of Rice, Pulses, Sugarcane, Cotton, and Coffee.</p> <p>2.10. Assignment: By selecting a region students have to study the Locational Factors nearby area/region/river projects/prepares a report and submits.</p>	10

3	Mineral and Power Resources:	
	<p>3.5. Types of Mineral Resources; Distribution and Production of Iron Ore, Manganese and Bauxite and their economic significance.</p> <p>3.6. Conservation of Mineral Resources and National Mineral Policy</p> <p>3.7. Power Resources: Distribution and Production of Hydel and Thermal Power Plants and their economic significance.</p> <p>3.8. Non-Conventional Energy Resources: Solar and Wind Energy</p>	10
	3.9. Field Study: By selecting region students have to examine the distribution of mineral/power resources, prepare a report and submit.	
4	Industries, Transportation and Communication:	10
	<p>4.5. Locational Factors of Industries, Major Industrial Regions and their Characteristics.</p> <p>4.6. Classification, Distribution and Production of Industries: Agrobased: Sugar and Cotton Textile Industries, Mineral-based: Iron and Steel and Forest-based: Paper industry in Karnataka.</p> <p>4.7. Special Economic Zones: Industrial and Economic Corridor.</p> <p>4.8. Transportation and Communication: Significance, Growth and Development of Road, Railway, Airway Networks and Major Ports of Karnataka.</p>	
5	Population and Tourism:	10
	<p>5.1. Population: Growth and Distribution of Population.</p> <p>5.2. Urbanization: Meaning, Trends of Urbanization in Karnataka.</p> <p>5.3. Tourism: Significance and Major Tourist Centers in Karnataka.</p> <p>5.4. Locating and labelling the given places on the given map of Karnataka: Hills, District Head Quarters, Rivers, Projects, Soils, Roads, Mining Areas, Industries, Towns and Tourist Centers, Major Cities, National Parks and Wildlife Sanctuaries, Airports and Ports.</p> <p><i>(Note: Staff in charge should supply the outline map of Karnataka and train the students and it has to be treated as compulsory question in semester end examination.)</i></p>	
	Total Teaching Hours	52

References:

9. Karnataka State Gazetteer (1969): Government of Karnataka, Bengaluru, Volume I & II
10. P. Mallappa (2019): Geography of Karnataka ((English & Kannada Version)
11. Misra R.P (1978): Geography of Mysore State
12. NBK Reddy and Murthy G.S (1976): Regional Geography of Mysore State
13. Dr. Ranganath (2018): Regional Geography of Karnataka (English & Kannada Version)
14. Nanjannavar S. S (2020): Geography of Karnataka. (English & Kannada version) Vidhyinidi Prakashan, Station Road, Gadag
15. Sharma T C & Coutinho O (2017): Economic and Commercial Geography of India, Vikas Publishing House Ltd., New Delhi-14
16. M. B. Goudar (2018): Geography of Karnataka, Vidhyinidi Prakashan Station Road, Gadag.

Websites:

6. <http://www.mapsofindia.com/geography/>
7. <http://www.des.kar.nic.in>
8. <https://mausam.imd.gov.in/>
9. <https://tourism.gov.in/>
10. <https://www.resourcedata.org/dataset/rgi-ministry-of-minerals-energy-and-water-resources>
11. <https://dpiit.gov.in/>
12. <https://agricoop.nic.in/en>
13. <https://www.fao.org/soils-portal/en/>

Formative Assessment for theory	
Assessment Occasion/Type	Marks
Internal Assessment Test 1	05
Internal Assessment Test 1	05
Assignment	10
Total	20 Marks
Formative Assessment as per guidelines.	



RANI CHANNAMMA UNIVERSITY, BELAGAVI

B. A. /B. Sc. SEP-2024 SYLLABUS IN GEOGRAPHY

IVth SEMESTER PRACTICAL PAPER – 4.2: MAP PROJECTIONS

(w. e. f. 2025-26 and onwards)

Type of Course	Theory/ Practical	Credits	Instruction hour per week	Total no of Lectures/Hours /Semester	Duration of Exam	Formative assessment marks	Summative assessment marks	Total marks
DSC	Practical	02	04	56 hrs	3hrs	10	40	50

Units	Topic	Teaching Hours
1	Introduction: Meaning, Classification and Importance of Map Projections. Meaning and Purpose of Latitudes and Longitude.	12
2	Cylindrical Projections: Introduction, Graphical Construction, Properties and Uses of Cylindrical Projections. Simple Cylindrical Projection. Cylindrical Equal Area Projection. Mercator's Projection.	12
3	Conical Projections: Introduction and Graphical Construction, Properties and Uses of Conical Projections. Conical Projection with One Standard Parallel Conical Projection with Two Standard Parallel Bonne's Projection.	12
4	Zenithal Projections : Introduction and Graphical Construction, Properties and Uses of Zenithal Projections. Polar Zenithal Gnomonic Projections. Polar Zenithal Stereographic Projections. Polar Zenithal Orthographic Projections.	12
	Total Teaching Hours	48

References:

1. Mishra R.N. and Sharma P. K. (2023): Practical Geography, Methods and Techniques, Prateek Publications Jaipur.
2. Mishra R.P. and Ramesh A. (1989): Fundamentals of Cartography, Concept Publishing.
3. Singh, R.L. (2005): Elements of Practical Geography. Kalyani Publishers, New Delhi. India.
4. Singh, G. (2005): Map Work & Practical Geography. Vikas Publishing House Pvt. Ltd., Delhi
5. Siddhartha, K. (2006): Geography through maps, Kisalaya Publications Pvt. Ltd, Delhi
6. S. S. Nanjannavar (2020): Practical Geography Prabu Publication, Dharwad.

Formative Assessment for theory	
Assessment Occasion/Type	Marks
Internal Assessment Test 1	05
Internal Assessment Test 1	05
Total	10 Marks
Formative Assessment as per guidelines.	



RANI CHANNAMMA UNIVERSITY

B. A. /B. Sc. SEP-2024 SYLLABUS IN GEOGRAPHY

B.A. IV Semester – Geography (Skill Enhancement Course)

Course Title: *Basics of Cartography and Geospatial Skills*

Type of Course	Theory/ Practical	Credits	Instruction hour per week	Total no of Lectures/Hours /Semester	Duration of Exam	Formative assessment marks	Summative assessment marks	Total marks
SEC	Theory	02	04	48	3hrs	10	40	50

Unit 1: Introduction to Cartography

- Meaning and types of maps
- Elements of a map
- Map scales – types and uses

Unit 2: Map Drawing

- Conventional signs and symbols
- Relief representation – contours
- Drawing simple maps and profiles

Unit 3: Data Representation

- Graphs and diagrams – bar, pie, line
- Thematic maps – choropleth, dot
- Sources of data

Unit 4: Geospatial Tools (Basics)

- Basics of Remote Sensing, GIS, GPS
- Use of Google Earth
- Introduction to QGIS (basic use only)

Suggested Readings / References:

1. Singh, R.L. – *Elements of Practical Geography*
2. Monkhouse, F.J. & Wilkinson, H.R. – *Maps and Diagrams*
3. Sarkar, A. – *Practical Geography: A Systematic Approach*
4. Ghosh, A. – *Introduction to Map Work and Practical Geography*
5. Heywood, I. et al. – *An Introduction to Geographical Information Systems*



RANI CHANNAMMA UNIVERSITY

B. A. /B. Sc. SEP-2024 SYLLABUS IN GEOGRAPHY

B.A. Geography – IV Semester Elective

Course Objectives

1. To understand the physical and cultural geography of Karnataka.
2. To analyse natural resources and their regional distribution.
3. To examine agriculture, industries and economic development of Karnataka.
4. To develop awareness about environmental issues and regional planning in the state.

Type of Course	Theory/ Practical	Credits	Instruction hour per week	Total no of Lectures/Hours /Semester	Duration of Exam	Formative assessment marks	Summative assessment marks	Total marks
ELECTIVE	Theory	2	03	48	3hrs	10	40	50

Unit	Title: -	48hrs/ sem
Unit I	Physical Geography of Karnataka:- 1. Location and Extent:- Latitudinal and Longitudinal extent,Boundaries and Physiographic divisions, 2 Physiography:- Western Ghats,Coastal Plain,Deccan Plateau, 3. Climate:- Factors influencing climate,Monsoon system,Rainfall distribution, 4. Drainage:- Major Rivers,Krishna River,Cauvery River,Tungabhadra River 5. Soils and Natural Vegetation:- Types of soils,Forest types	16 hrs
Unit II	Resources and Economic Geography:- 1. Agriculture:- Major crops: Rice, Ragi, Jowar, Sugarcane, Coffee,Plantation crops,Irrigation projects, 2. Minerals:- Iron ore,Manganese,Gold (Kolar Gold Fields), 3. Power Resources:- Hydel power (e.g., Sharavathi Hydroelectric Project),Thermal and Renewable energy, 4. Industries:- Iron and Steel (Visvesvaraya Iron and Steel Plant),Silk Industry,Information Technology (Bengaluru as IT hub)	16 hrs
Unit III	Population, Transport and Regional Development:- 1. Population:- Growth and distribution,Density,Urbanization, 2. Transport and Communication:- Roadways,Railways,Ports (e.g., New Mangalore Port),Air transport, 3. Regional Development:- Backward regions,Regional disparities,Role of planning in Karnataka, 4 Environmental Issues:- Deforestation,Drought,Conservation measures	16 hrs

References

1. Government of Karnataka – *Karnataka State Gazetteer*.
2. Ranganath, B.K. – *Geography of Karnataka*.
3. Mysore University – *Karnataka Geography Textbook*.
4. NCERT – *Indian Geography*.
5. Department of Economics and Statistics, Government of Karnataka – *Statistical Handbook of Karnataka*.

Formative Assessment for theory	
Assessment Occasion/Type	Marks
Internal Assessment Test 1	05
Internal Assessment Test 1	05
Total	10 Marks
Formative Assessment as per guidelines.	

BA/BSC. Semester-V
Discipline Specific Course (DSC)

Course Title: PAPER 5.1: ECONOMIC GEOGRAPHY

Course code: -

Type of Course	Theory/ Practical	Credits	Instruction hour per week	Total no of Lectures/Hours /Semester	Duration of Exam	Formative assessment marks	Summative assessment marks	Total marks
DSC	Theory	04	04	60 hrs	3hrs	20	80	100

Course Outcomes: After completion of this course students will be able to:

CO1: Explain concepts and approaches of economic geography.

CO2: Interpret distribution of natural resources.

CO3: Analyze agricultural and industrial patterns.

CO4: Evaluate role of transport and trade.

CO5: Apply sustainability concepts in regional development.

Unit	Title: -ECONOMIC GEOGRAPHY	60hrs/ sem
Unit I	Fundamentals of Economic Geography: Meaning and Scope Definition of Economic Geography, Nature and evolution of Economic Geography, Relationship with other branches of Geography, Importance in regional and global development, Economic landscape, Location and distribution, Spatial organization of economic activities, Resource classification and utilization, Theoretical Approaches: -Environmental determinism and possibilism, Economic location theories, Concepts of economic regions	15 hrs
Unit II	World Resources and Primary Activities: Types of resources, Renewable and non-renewable resources, Biotic and abiotic resources, Global distribution of major natural resources, Agricultural Geography: -Types of agriculture, Subsistence agriculture, Commercial agriculture, Plantation agriculture, Mixed farming, Factors Influencing Agriculture, Physical factors (climate, soil, relief), Socio-economic factors, Agricultural productivity and food security.	15 hrs
Unit III	Secondary Activities (Industries): Meaning and classification of industries, Factors influencing industrial location, Raw materials, Labour, Market, Transport, Power, Major Industrial Regions of the World: -North America, Western Europe, East Asia, India, Industrial Development and Globalization: -Industrial policies, Industrial pollution and environmental impacts.	15 hrs
Unit IV	Transport, Trade and Sustainable Economic Development: Importance of transport in economic development, Modes of transport, Road, Rail, Water, Air, Pipeline Trade and Commerce: -Types of trade, Internal trade, International trade, Global trade patterns, TO and international trade organizations, Sustainable Economic Development: -Concept of sustainable development, Green economy, Resource conservation, Regional economic inequalities	15 hrs

Books Recommended

Text Books:

- Economic Geography – H.M. Saxena
- A Comprehensive Economic Geography (**Rajesh Publications**)
- Economics Geography BA/BSc (NEP Syllabus) by *D.R. Khullar*
- Economic Geography of India

References:

- Economic and Commercial Geography of India – **Sharma & Coutinho**
- Economic and Commercial Geography of India – **C.B. Mamoria**
- Physical, Human & Economic Geography – **D.R. Khullar**

Websites

- 🔗 <https://uou.ac.in/sites/default/files/slm/GE-302.pdf>
- 🔗 https://mpbou.edu.in/uploads/files/PAPER-19_GEOGRAPHY-II.pdf
- 🔗 https://www.uprtou.ac.in/other_pdf/27062025_DCEGO_101.pdf
- 🔗 <https://www.scribd.com/document/882092428/Unit-1-Economic-Geography>
- 🔗 <https://www.scribd.com/document/908942259/Economic-geography>
- 🔗 <https://www.geographynotespdf.com/आर्थिक-भूगोल/>

Formative Assessment for theory	
Assessment Occasion/Type	Marks
Internal Assessment Test 1	05
Internal Assessment Test 1	05
Assignment	10
Total	20 Marks
Formative Assessment as per guidelines.	

BA/BSC. Semester-V
Discipline Specific Course (DSC)

Course Title: PAPER 5.2: GEOGRAPHICAL THOUGHT

Course code: -

Type of Course	Theory/ Practical	Credits	Instruction hour per week	Total no of Lectures/Hours /Semester	Duration of Exam	Formative assessment marks	Summative assessment marks	Total marks
DSC	Theory	04	04	60 hrs	3hrs	20	80	100

Course Outcomes: After completion of this course students will be able to:

CO1: Trace development of geographical thought.

CO2: Differentiate major schools.

CO3: Apply concepts to contemporary issues.

Unit	Title: - GEOGRAPHICAL THOUGHT	60hrs/sem
Unit I	Evolution of Geographical Thought:- Origin and development of geographical ideas; geographical knowledge in ancient civilizations including Greek, Roman, Arab and Indian contributions; geography during medieval and renaissance periods; role of explorations and discoveries; development of modern geography; transition from descriptive to scientific and analytical geography.	15 hrs
Unit II	Deterministic and Possibilistic Approaches:- Concept and principles of environmental determinism; contributions of Friedrich Ratzel, Ellen Churchill Semple and Ellsworth Huntington; concept and development of possibilism; contributions of Vidal de la Blache and Lucien Febvre; neo-determinism and its relevance in modern geographical studies.	15 hrs
Unit III	Contributions of Modern Geographical Thinkers:- Scientific contributions of Alexander von Humboldt and Carl Ritter; development of regional geography and contributions of Richard Hartshorne; emergence of quantitative revolution; behavioural, radical and humanistic approaches in geography and their significance.	15 hrs
Unit IV	Contemporary Trends in Geographical Thought:- Systems approach and spatial analysis in geography; development and application of geographical models and theories; role of Remote Sensing, GIS and geospatial technologies; interdisciplinary approach in geography; relevance of geographical thought in sustainable development and environmental management.	15 hrs

Books Recommended

Text Books:

Evolution of Geographical Thought — *Majid Husain*

Geographical Thought — *R.D. Dikshit (sometimes listed as Dikshit / Dixit)*

Fundamentals of Geographical Thought — *Sudeepta Adhikari (Adhikary)*

Geographical Thought — *Lalita Rana*

References:

Husain, M. (2014). *Evolution of Geographical Thought* (7th ed.). Rawat Publications.

Dikshit, R. D. (2013). *Geographical Thought: A Contextual History of Ideas*. Prentice Hall India.

Adhikary, S. (2011). *Fundamentals of Geographical Thought*. Orient BlackSwan.

Rana, L. (2010). *Geographical Thought*. Prentice Hall India.

Websites

<https://lotusarise.com/evolution-of-geographical-thought-notes/>

<https://youtu.be/cjyQuaMOvv0?si=nfZn-MNdSSmwkMW2>

https://tnou.ac.in/eslm/PG/M.SC%20GEOGRAPHY/III%20Sem/MGEOS-31%20Geographical%20Thought_Book.pdf

<https://www.scribd.com/document/410101002/Geographical-Thought-Class-Notes>

Formative Assessment for theory	
Assessment Occasion/Type	Marks
Internal Assessment Test 1	05
Internal Assessment Test 1	05
Assignment	10
Total	20 Marks
Formative Assessment as per guidelines.	

BA/BSC. Semester-V
Discipline Specific Course (DSC)

Course Title: PAPER 5.3: STATISTICAL METHODS IN GEOGRAPHY

Course code: -

Type of Course	Theory/ Practical	Credits	Instruction hour per week	Total no of Lectures/Hours /Semester	Duration of Exam	Formative assessment marks	Summative assessment marks	Total marks
DSC	Practical	02	04	56 hrs	3hrs	10	40	50

Course Outcomes: After completion of this course students will be able to:

CO1: Organize geographical data.

CO2: Compute central tendency.

CO3: Apply correlation and regression

Unit	Title: - STATISTICAL METHODS IN GEOGRAPHY	56hrs/sem
Unit I	Introduction to Statistical Methods:- Meaning, nature and importance of statistics in geography; types and sources of geographical data; methods of data collection including primary and secondary data; classification, tabulation and presentation of data; diagrammatic and graphical representation including bar diagrams, pie diagrams, histograms, frequency polygons and cumulative frequency curves.	14 hrs
Unit II	Measures of Central Tendency and Dispersion:- Concept and calculation of measures of central tendency including mean, median and mode; weighted mean and combined mean; concept and calculation of measures of dispersion including range, quartile deviation, mean deviation and standard deviation; coefficient of variation and its geographical applications.	14 hrs
Unit III	Correlation and Regression Analysis:- Concept and types of correlation; scatter diagram and interpretation; Karl Pearson's coefficient of correlation; Spearman's rank correlation; regression analysis including regression lines and equations; significance and applications of correlation and regression in geographical studies.	14 hrs
Unit IV	Spatial Statistical Techniques:- Concept of probability and normal distribution; sampling techniques including random, systematic and stratified sampling; time series analysis and trend analysis; application of statistical techniques in geographical studies including population, agriculture, rainfall and economic data analysis.	14 hrs

General Instructions:

Conduct all exercises with Goal, Procedure, devices, findings and diagram.

Books Recommended

Text Books:

Statistical Methods for Geography: A Student's Guide by **Peter A. Rogerson**

Statistical Methods in Geographical Studies by **Aslam Mahmood**

Statistical Geography: Methods & Applications by **Zamir Alvi**

References:

Statistical Methods for Geographers:-By Wiley / other publishers

Statistical Methods for Geography: A Student's Guide:-Author: Peter A. Rogerson

Websites

<https://www.scribd.com/document/828787000/Statistical-Methods-in-Geography>

<https://www.studocu.com/in/document/kamla-nehru-college/statistical-methods-in-geography-practical/statistical-methods-in-geography-practical-file-semester-3/81942419>

<https://www.furkatingcollege.edu.in/wp-content/uploads/2021/05/PRACTICAL-WORK-IN-GEOGRAPHY.pdf>

Formative Assessment for theory	
Assessment Occasion/Type	Marks
Internal Assessment Test 1	05
Internal Assessment Test 1	05
Total	10 Marks
Formative Assessment as per guidelines.	

BA/BSC. Semester-V
Skill enhancement course

Course Title: PAPER 5.4: BASIC QUANTITATIVE TECHNIQUES

Course code: -

Type of Course	Theory/ Practical	Credits	Instruction hour per week	Total no of Lectures/Hours /Semester	Duration of Exam	Formative assessment marks	Summative assessment marks	Total marks
SEC	SEC	02	04	56 hrs	3hrs	10	40	50

Course Outcomes: After completion of this course students will be able to:

CO1: Construct diagrams and scales.

CO2: Apply sampling methods.

CO3: Use spatial quantitative models

Unit	Title: - BASIC QUANTITATIVE TECHNIQUES	56hrs/sem
Unit I	Fundamentals of Quantitative Techniques :-Meaning, nature and importance of quantitative techniques in geography; types and sources of quantitative data; methods of data collection; classification, tabulation and presentation of data; diagrammatic and graphical representation including bar diagrams, pie diagrams, histograms, frequency curves and cumulative frequency curves.	14 hrs
Unit II	Basic Mathematical Techniques:- Concept and application of ratios, proportions, percentages and averages; calculation and interpretation of mean, median and mode; introduction to logarithms and their applications; basic algebraic methods and matrices; use of mathematical techniques in geographical data analysis.	14 hrs
Unit III	Quantitative Analysis in Geography:- Measures of dispersion including range, quartile deviation, mean deviation and standard deviation; coefficient of variation; correlation and regression analysis; scatter diagram and rank correlation; applications of quantitative techniques in population, agriculture and economic geography.	14 hrs
Unit IV	Spatial Quantitative Techniques:- Concept of sampling techniques including random, systematic and stratified sampling; time series analysis and trend analysis; spatial distribution and nearest neighbour analysis; introduction to quantitative techniques in GIS and spatial modelling; application of quantitative methods in environmental and resource studies.	14 hrs

General Instructions:

Conduct all exercises with Goal, Procedure, devices, findings and diagram.

Books Recommended

Text Books:

1. *Quantitative Techniques in Geography: An Introduction* — **R. Hammond**
2. *Quantitative Geography: The Basics* — **Richard Harris (et al.)**
3. *Quantitative Methods in Geography: An Introduction to Spatial Analysis* — **Peter J. Taylor**

References:

- Hammond, R., McCullagh, P., & Cliff, A. D. (1975). *Quantitative Techniques in Geography: An Introduction*. Oxford University Press.
- Harris, R., & Sleight, P. (2005). *Quantitative Geography: A Critical Introduction*. Routledge.
- Taylor, P. J., Johnston, R. J., & Watts, M. (2000). *Geographies of Economies* (includes quantitative methods chapters). Wiley.

Websites

<https://uou.ac.in/sites/default/files/slm/GEOG-510.pdf>

<https://tnou.ac.in/NAAC/SSR/C1/1.1.5/MGEOSE-21.pdf>

<https://orca.cardiff.ac.uk/59957/1/report-130906041556-.pdf>

<https://ndl.ethernet.edu.et/bitstream/123456789/18641/1/87.pdf>

Formative Assessment for theory	
Assessment Occasion/Type	Marks
Internal Assessment Test 1	05
Internal Assessment Test 1	05
Total	10 Marks
Formative Assessment as per guidelines.	

BA/BSC. Semester-VI
Discipline Specific Course (DSC)

Course Title: PAPER 6.1: REGIONAL GEOGRAPHY OF INDIA

Course code: -

Type of Course	Theory/ Practical	Credits	Instruction hour per week	Total no of Lectures/Hours /Semester	Duration of Exam	Formative assessment marks	Summative assessment marks	Total marks
DSC	Theory	04	04	60 hrs	3hrs	20	80	100

Course Outcomes: After completion of this course students will be able to:

CO1: Explain regional diversity of India

CO2: Analyse resource distribution.

CO3: Interpret population patterns.

CO4: Evaluate regional planning.

Unit	Title: - REGIONAL GEOGRAPHY OF INDIA	60hrs/ sem
Unit I	Physical Regions of India:- Location, extent and physiographic divisions of India including the Himalayas, Northern Plains, Peninsular Plateau, Coastal Plains and Islands; climate of India including monsoon system, seasons and climatic regions; major river systems of India including Himalayan and Peninsular rivers; natural vegetation and soil types of India and their distribution.	15 hrs
Unit II	Cultural and Population Regions of India:- Distribution, growth and density of population in India; population composition including literacy, sex ratio and occupational structure; rural and urban settlement patterns; cultural regions of India including language, religion and ethnicity; migration patterns and urbanization trends in India.	15 hrs
Unit III	Resources and Economic Activities in India:- Distribution and utilization of natural resources including mineral resources, forest resources, water resources and energy resources; agricultural regions of India including major crops and cropping patterns; industrial regions and industrial development in India; role of transport and communication in economic development.	15 hrs
Unit IV	Regional Development and Planning in India :- Concept of regional planning and balanced regional development; regional disparities in India; role of Five-Year Plans and NITI Aayog in regional development; environmental issues and resource management in India; sustainable development and regional planning strategies.	15 hrs

Books Recommended

Text Books:

Geography of India – Majid Husain

India: A Regional Geography – R. L. Singh (Ed.)

Indian and World Geography – Pallavi Saxena (Majid Husain series)

Indian Geography – D. R. Khullar

References:

Husain, M. (2022). *Geography of India* (7th ed.). New Delhi: McMillan Publishers.

Singh, R.L. (Ed.). (2001). *India: A Regional Geography* (5th ed.). Delhi: National Geographical Society of India.

Chopra, S. L., & Das, P. R. (1988). *A Textbook of Geomorphology*. New Delhi: S. Chand & Co

Websites

<https://egyankosh.ac.in/bitstream/123456789/100836/3/Block-2.pdf>

<https://ugcmoocs.inflibnet.ac.in/assets/uploads/1/146/5069/et/16%20regional%20geography%20of%20india200304050503034545.pdf>

https://en.wikipedia.org/wiki/Geography_of_India

Formative Assessment for theory	
Assessment Occasion/Type	Marks
Internal Assessment Test 1	05
Internal Assessment Test 1	05
Assignment	10
Total	20 Marks
Formative Assessment as per guidelines.	

BA/BSC. Semester-VI
Discipline Specific Course (DSC)

Course Title: PAPER 6.2: GEOGRAPHY OF SETTLEMENT

Course code: -

Type of Course	Theory/ Practical	Credits	Instruction hour per week	Total no of Lectures/Hours /Semester	Duration of Exam	Formative assessment marks	Summative assessment marks	Total marks
DSC	Theory	04	04	60 hrs	3hrs	20	80	100

Course Outcomes: After completion of this course students will be able to:

CO1: Classify settlements.

CO2: Explain urban structure.

CO3: Analyse settlement problems

Unit	Title: - GEOGRAPHY OF SETTLEMENT	60hrs/sem
Unit I	Fundamentals of Settlement Geography:- Meaning, nature and scope of settlement geography; origin and evolution of human settlements; classification of settlements based on size, function and pattern; factors influencing settlement location including physical, economic, social and cultural factors; types of rural and urban settlements and their characteristics.	15 hrs
Unit II	Rural Settlements:- Types and patterns of rural settlements including dispersed, nucleated and semi-clustered settlements; morphology of rural settlements; house types and building materials; rural settlement structure and land use patterns; rural development and transformation of rural settlements	15 hrs
Unit III	Urban Settlements:- Origin and growth of towns and cities; classification of urban settlements; urban morphology including land use zones, central business district, residential and industrial zones; urban functional classification; urbanization process, trends and problems including slums, congestion and pollution.	15 hrs
Unit IV	Settlement Planning and Development Concept and principles of settlement planning; rural settlement planning and development programmes; urban planning including master plans and zoning regulations; smart cities and sustainable urban development; role of transport and infrastructure in settlement development.	15 hrs

Books Recommended

Text Books:

Human Settlements: Patterns and Processes — **K. Siddhartha & M. Bhattacharya**

Settlement Geography — **R. J. Johnston & P. J. Taylor**

The Human Mosaic: A Thematic Introduction to Cultural Geography — **T. M. Smith & R. W. McDonald**

Geography of Settlements — **B. K. Sharma & G. C. Sharma**

References:

Johnston, R. J., & Taylor, P. J. (1982). *Settlement Geography*. London: Edward Arnold.

Pacione, M. (2009). *Urban Geography: A Global Perspective* (3rd ed.). London: Routledge.

Macionis, J. J., & Parrillo, V. N. (2012). *Cities and Urban Life*. Boston: Pearson.

Websites

<https://www.iqraias.com/wp-content/uploads/2021/04/Settlement-Geography.pdf>

<https://www.scribd.com/document/863703381/Unit-3-Settlement-Geography>

<https://www.nios.ac.in/media/documents/316courseE/ch29.pdf>

<https://www.geographynotespdf.com/concept-of-rural-and-urban-settlement/>

Formative Assessment for theory	
Assessment Occasion/Type	Marks
Internal Assessment Test 1	05
Internal Assessment Test 1	05
Assignment	10
Total	20 Marks
Formative Assessment as per guidelines.	

BA/BSC. Semester-VI
Discipline Specific Course (DSC)

Course Title: PAPER 6.3: GEOGRAPHICAL DATA ANALYSIS & DIAGRAMS

Course code: -

Type of Course	Theory/ Practical	Credits	Instruction hour per week	Total no of Lectures/Hours /Semester	Duration of Exam	Formative assessment marks	Summative assessment marks	Total marks
DSC	Practical	02	04	56 hrs	3hrs	10	40	50

Course Outcomes: After completion of this course students will be able to:

CO1: Prepare diagrams and maps.

CO2: Interpret census data.

CO3: Apply thematic mapping.

Unit	Title: - GEOGRAPHICAL DATA ANALYSIS & DIAGRAMS	56hrs/sem
Unit I	Fundamentals of Geographical Data and Cartographic Techniques:- Nature, types and sources of geographical data including primary and secondary data; qualitative and quantitative data in geography; methods of data collection and organization; principles of cartography; scale, projection and map design; representation of geographical data using maps and diagrams.	14 hrs
Unit II	Diagrammatic Representation of Geographical Data:- Methods of diagrammatic representation including bar diagrams, multiple bar diagrams, percentage bar diagrams and pie diagrams; construction and interpretation of histograms, frequency polygons and cumulative frequency curves; use of line graphs and area diagrams in geographical data representation; advantages and limitations of diagrammatic methods.	14 hrs
Unit III	Thematic Mapping Techniques :- Concept and preparation of thematic maps including choropleth maps, dot maps, proportional symbol maps and isopleth maps; methods of classification and symbolization; interpretation of thematic maps; application of thematic mapping in socio-economic and environmental studies.	14 hrs
Unit IV	Analysis and Interpretation of Socio-Economic Data Techniques of analysing population, agricultural, industrial and economic data; use of statistical tools for geographical data interpretation; trend analysis and comparative analysis; application of geographical data analysis in regional planning and development studies; use of GIS and computer-based tools in data analysis.	14 hrs

General Instructions:

Conduct all exercises with Goal, Procedure, devices, findings and diagram.

Books Recommended

Text Books:

Rogerson, P. A. (2001). *Statistical Methods for Geography: A Student's Guide*. SAGE Publications.

Mahmood, A. (1986). *Statistical Methods in Geographical Studies*. Rajesh Publications.

Burrough, P. A., & McDonnell, R. A. (1998). *Principles of Geographical Information Systems*. Oxford University Press.

References:

Sharma, J. P., & Mishra, P. L. (2016). *Practical Geography: Methods and Techniques*. McGraw-Hill Education.

Mark, D. M., & Todd, W. J. (2003). *Applied Spatial Statistics for Geographers*. Wiley.
– Introduces spatial statistics and analytical diagrams for spatial patterns.

Slocum, T. A., et al. (2009). *Thematic Cartography and Geovisualization*. Pearson.

Websites

<https://ncert.nic.in/textbook/pdf/legy303.pdf>

<https://uou.ac.in/sites/default/files/slm/GEOG-510.pdf>

<https://adpcollege.ac.in/online/attendance/classnotes/files/1743837556.pdf>

<https://nios.ac.in/media/documents/316-New/Book-2/Practical-3.pdf>

Formative Assessment for theory	
Assessment Occasion/Type	Marks
Internal Assessment Test 1	05
Internal Assessment Test 1	05
Total	10 Marks
Formative Assessment as per guidelines.	

BA/BSC. Semester-VI
Discipline Specific Course (DSC)

Course Title: PAPER 6.4: -PROJECT WORK & VIVA

Course code: -

Type of Course	Theory/ Practical	Credits	Instruction hour per week	Total no of Lectures/Hours /Semester	Duration of Exam	Formative assessment marks	Summative assessment marks	Total marks
SEC	Practical	02	04	56 hrs	3hrs	10	40	50

Course Outcomes: After completion of this course students will be able to:

CO1: Conduct field survey independently.

CO2: Analyze primary data.

CO3: Prepare scientific project report.

CO4: Defend work in viva-voce.

Unit	Title: -	56hrs/sem
Unit I	Fundamentals of Field Research :-Meaning, importance and objectives of field research in geography; types of field studies including physical, social and economic geographical studies; selection of research problem and formulation of objectives; preparation of fieldwork design; methods of data collection including observation, questionnaire, interview and sampling techniques.	14 hrs
Unit II	Field Data Collection and Processing :- Planning and execution of field survey; use of field instruments including GPS, maps and survey tools; recording and documentation of field data; classification, tabulation and processing of collected data; use of statistical and cartographic techniques for data presentation.	14 hrs
Unit III	Project Report Preparation :- Structure and format of geographical project report; preparation of introduction, literature review, methodology and analysis; use of maps, diagrams, tables and photographs in report writing; interpretation of results and drawing conclusions; referencing and bibliography preparation.	14 hrs
Unit IV	Project Presentation and Viva Voce :-Preparation and presentation of project findings using charts, maps and digital tools; communication and presentation skills; evaluation of project work; oral examination (viva voce) based on field study, data analysis and report writing; overall assessment of research understanding and practical knowledge.	14 hrs

General Instructions:

Conduct all exercises with Goal, Procedure, devices, findings and diagram.

Books Recommended

Text Books:

Sharma, J. P. & Mishra, P. L. :-Practical Geography: Methods and Techniques

Singh, R. L. (Ed.):-Elements of Practical Geography

Dhillon, S. S. & Arora, S. P.:-Research Methodology in Geography

References:

Kothari, C. R. (2004).

Research Methodology: Methods & Techniques. New Delhi: New Age International Publishers.

Dhillon, S. S., & Arora, S. P. (2014).

Research Methodology in Geography. New Delhi: Kalyani Publishers.

Ranjit, K. (2005).

Research Methodology: A Step-by-Step Guide for Beginners. New Delhi: SAGE Publications.

Joshi, P. K. (2010).

Project Work in Geography. Meerut: Rastogi Publications.

Websites

https://www.kngac.ac.in/elearningportal/ec/admin/contents/2_18KP3G09_2020112102412876.pdf

<https://www.scribd.com/document/619355414/Geography-g-12-unit-1>

<https://www.scribd.com/document/664220926/Paper-301-Research-Methodology-in-Geography-Englih-Version>

Formative Assessment for theory	
Assessment Occasion/Type	Marks
Internal Assessment Test 1	05
Internal Assessment Test 1	05
Total	10 Marks
Formative Assessment as per guidelines.	

MODEL QUESTION PAPER

Marks-80

SECTION-A

I Answer any 10 of the following question (At least 2 questions from each unit)

2x10=20

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.

SECTION-B

II Answer any 6 of the following questions. (At least 1 questions from each unit)

5x6=30

13.

- 14.
- 15.
- 16.
- 17.

18.

- 19.
- 20.

SECTION-C

III Answer any 3 of the following questions (At least 1 question from each unit)

10x3 =30

- 21.
- 22.
- 23.
- 24.
- 25.
- 26.