TUMKUR UNIVERSITY
TUMKUR

CBCS-CAGP Frame work for Bachelors of Arts and Science

Subject: GEOGRAPHY

Syllabus for I, II, III & IV Semester
B.A/B.Sc. Geography

2024-25 ONWARDS

Prof.SHARADAMMA.S.B
Chairman
BOS in Geography (UG)
Tumkur University, Tumkur

DEPARTMENT OF GEOGRAPHY
TUMKUR UNIVERSITY, TUMKUR-572103

Prof. SHARADAMMA.S.B
Assistant Professor

NO.BOS: UG: 2025-26/774 Date: 14-07-2025

TO,
The Registrar
Tumkur University,
Tumkur - 572103.

Respected Sir/Madam

Subject: Submission of BOS Geography (UG) Proceeding .
Reference: BOS: UG: 2025-26/26.06.2025.

This is for your kind information that, the Board of Studies in Geography (UG) meeting held on 14TH JULY 2025 at 10.30 A M.

Board members of UG Geography gathered for the meeting and framed the course structure, titles and detailed syllabus for the newly framed 3RD and 4TH semester BA Geography as per the CBCS-CAGP directed by University of Tumkur.

Kindly acknowledge the same Attachment

1. BOS Proceeding copy.
2. Newly Framed 3RD and 4TH semester BA Geography Syllabus with contents.

Thanking you.

Prof.SHARADAMMA.S.B
Chairman
BOS in Geography (UG)
Tumkur University, Tumkur

Proceedings

Of Curriculum and syllabus for B.A/B.Sc Geography
Under Graduate Programme in Geography

As per the guidelines issued in the Govt. of Karnataka order No: ED 166 UNE 2023 Bengaluru, Date: 08-05-2024, to implement the State Education Policy, the BOS, Geography UG Committee meeting was held **14th JULY, 2025 (Monday) in the Tumkur University Tumkur at 10.30 AM.** The BOS Meeting is conveyed to discuss and finalized curricula and syllabus for One year under graduate program commencing during 2025-26 for III & IV Semester and also to discuss and finalize the total structure of the Geography Course for whole B.A/B.Sc Program.

At the outset Prof.Sharadamma.S.B, Chairman, BOS, UG, and Assistant Professor , Department of Geography, Govt. First Grade College, Tiptur- 572201, welcomed the Committee members for the meeting and informed that University has directed to conduct BOS meeting to approve curriculum and syllabus for B.A/B.Sc. Geography Under Graduate Program in Geography to be commenced in 2025-26 which has been designed on par with guidelines given in the above-mentioned SEP Implementation order.

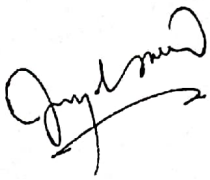
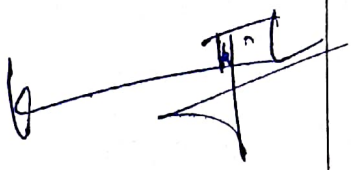
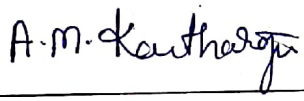
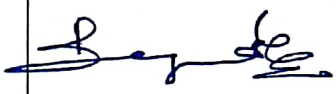
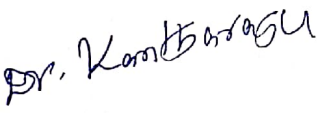
Subsequently, the BOS, UG Committee members discussed thoroughly and recommended as under:

	Item	Recommendations of the committee
1	Approval of the curriculum and syllabus for B.A./B.Sc. Geography Under Graduate Programme in Geography to be commenced in 2025-26 (III & IV SEM).	The BOS Committee resolved the curriculum and syllabus for B.A/B.Sc. Geography Under Graduate Programme in Geography to be commenced in 2025-26.
2	Approval of the curriculum and syllabus for B.A./B.Sc. Geography Under Graduate Programme in Geography	The BOS Committee resolved the curriculum Structure for B.A/B.Sc. Geography Under Graduate Programme in Geography.

Prof.Sharadamma.S.B Chairman BOS and Assistant Professor, assured that the recommendations of the committee will be submitted to the university for further processing. The meeting concluded with vote of thanks.

Prof.SHARADAMMA.S.B
Chairman
BOS in Geography (UG)
Tumkur University, Tumkur

Program Name	BA / BSc in Geography	Semester	III

Members of BOS		
SL. NO	**Name and Address**	**Signatures**
1	**Prof.Sharadamma.S.B,** Chairman, BOS-UG and Assistant Professor Department of Geography, Govt. First Grade College, Tiptur- 572201. Mob No: 9164995987 E-mail: sbsharada7@gmail.com	
2	**Prof.Jagadeesh.N** Assistant Professor Department of Geography, Govt. Arts College, Bengaluru. Mob No:9880025567 E-mail: jsh.worldopen@gmail.com	
3	**Prof.Krishanamurthy.M.K** Assistant Professor Department of Geography, Govt. First Grade College, K.R.Nagara, Mysore District. Mob No:9483587563 E-mail: kittijay@gmail.com	
4	**Mr. A.M.Kantharaju** Lecturer, Pallagatti Adavappa College, Tiptur. Mob No:9008730177 E-mail: amkantharaju74@gmail.com	
5	**Mr.Boregowda.M.L** Lecturer, Pallagatti Adavappa College, Tiptur. Mob No:9844418025 E-mail: boregowdaml@gmail.com	
6	**Dr.Kantharaju** Lecturer, Govt.First Grade College Tiptur. Mob No:9113674630 E-mail: rkantha218@gmail.com	

Prof.SHARADAMMA.S.B
Chairman
BOS in Geography (UG)
Tumkur University, Tumkur

BATCHELOR OF ARTS –GEOGRAPHY COURSE MATRICS
REGULAR SEP SYLLABUS.

SEM	TYPE OF THE PAPER	PAPER TITLE	HOURS PER WEEK	DURATION OF EXAM	IA	EXAM	TOTAL MARKS	CREDITS
I	DSCGE- 1 Theory	Fundamentals of physical Geography	05	03	20	80	100	03
	DSCGEP- Practical	Map and mapping techniques	04	03	10	40	50	02
II	DSCGE- 2 Theory	Principles of Climatology and Oceanography	05	03	20	80	100	03
	DSCGEP- Practical	Applied Meteorology	04	03	10	40	50	02
III	DSCGE- 3 Theory	Human Geography	05	03	20	80	100	03
	DSCGEP- Practical	Map Projection	04	03	10	40	50	02
IV	DSCGE- 4 Theory	Geography of India	05	03	20	80	100	03
	DSCGEP- Practical	Cartographic Techniques	04	03	10	40	50	02
III	DSEGE- Elective	1.Introduction to Physical Geography **OR** 1.A. Introduction to Karnataka Geography	03	03	20	80	100	03
IV	DSEGE- Elective	1.Introduction to Indian Geography **OR** 1.A. Introduction to World Regional Geography	03	03	02	80	100	03

Prof.SHARADAMMA.S.B
Chairman
BOS in Geography (UG)
Tumkur University, Tumkur

SEMESTER –I
PAPER I: FUNDAMENTALS OF PHYSICAL GEOGRAPHY
(THEORY)

Credits: 03 **Total Number of Teaching Hours : 60**

UNIT-I: Introduction to Physical Geography: **Hours: 10**

1. Geography: Meaning, Definition and Branches of Geography-- Physical and Human Geography.
2. Physical Geography: Meaning, Definition Nature, Field, Scope and Importance.

UNIT-II: The Dynamics of Earth: **Hours: 15**

1. Theories of Origin of the Earth: Nebular and Big Bang theories.
2. Movements of the Earth: Rotation, Revolution and their effects.
3. Geological Timescale

UNIT-III: Structure of the Earth: **Hours: 15**

1. Distribution of land and water
2. Structure and composition of the interior of the Earth
3. Continental Drift theory of Alfred Wegener and Plate tectonics theory.

UNIT-IV: Geomorphic Process and Evolution of Land forms: **Hours: 20**

1. Folds and faults
2. Earthquakes, Volcanoes and Landslides- causes, types, distribution and consequences.
3. Formation of Rocks and its Types.
4. Weathering: Meaning, types and controlling factors.
5. Denudation: Agents of Denudation- River, Wind and Glacier.
6. Development of Landforms- Mountains, Plateaus and Plains-Meaning, Origin and Types.

SEMESTER –I
PRACTICAL I: MAP AND MAPPING TECHNIQUES

(PRACTICAL)

Credits: 02 **Total Number of Teaching Hours : 45**

UNIT-I: Cartography: **Hours: 15**

1. Maps -Meaning, Definition Types and Importance.
2. Scale-Meaning and Types, conversion of scales and Construction of graphical scales- Linear and Diagonal.
3. Geographical coordinates system- Latitude, Longitude, enlarge and reduce.

UNIT-II: Identification of Rocks and Relief Profiles: **Hours: 15**

1. Identification of Rocks and minerals: Granite, Basalt, Limestone, Sandstone, Quartzite and marble, iron ore, manganese, bauxite.
2. Construction of Relief Profiles – Serial, Super Imposed, Projected and Composite.
3. Calculation and Measuring of Slope and Elevation.

UNIT-III: Interpretation of Relief Features: **Hours: 15**

1 Contours, Hechure, Spot Height, Bench Mark.
2 Hills – Conical hill, plateau, Ridge.
3 Slopes- uniform, undulating, concave and convex.
4 Valley-' U' Shaped and 'V' Shaped valley.

SEMESTER –II
PAPER II: PRINCIPLES OF CLIMATOLOGY AND OCEANOGRAPHY (THEORY)

Total Number of Teaching Hours: 60

Credits: 03

Hours: 10

UNIT-I: Elements of Atmosphere:

1. Climatology: Meaning, Nature, Scope and Importance.
2. Atmosphere: Origin, structure and composition.
3. Weather and Climate: Meaning, Elements, Controlling factors and Climate Change.

Hours: 15

UNIT-II: Temperature and Pressure:

1. Temperature- Insolation and Factors Affecting the Insolation, Heating and Cooling Process of the Atmosphere, Heat budget, Vertical and Horizontal Distribution of Temperature, Inversion of Temperature.
2. Pressure: Influencing factors on Atmospheric Pressure, Distribution of Atmospheric Pressure- Vertical and Horizontal, World Pressure belts, shifting of pressure belts.

Hours: 15

UNIT-III: Winds and Humidity:

1. Winds- Meaning, influencing factors and types.
2. Humidity- Meaning, Types-Absolute, Relative and Specific
3. Precipitation- Meaning, Types and impact on weather and climate.

Hours:-20

UNIT-IV: Oceanography:

1. Introductions of Oceans.
2. Relief Features of Bottom of the Ocean.
3. Temperature and Salinity of Ocean Water- Influencing factors and its distributions.
4. Ocean currents- Causes and Types Ocean currents- Pacific, Atlantic and Indian Ocean.
5. Ocean tides- Causes, Types and Consequences.

SEMESTER –II
PRACTICAL II: APPLIED METEOROLOGY.

(PRACTICAL)

Total Number of Teaching Hours : 45

Credits: 02

UNIT-I: METEOROLOGY- Measuring Instruments: **Hours: 15**

1. Importance of meteorology data- Indian Meteorological Data (IMD).

2. Devices used to measure and record Meteorology data and their working principles.
   a) Centigrade and Fahrenheit thermo meter.
   b) Mercurial Barometer and Aneroid Barometer
   c) Wind vane and cup Anemometer
   d) Rainguage- self recording

UNIT-II: Representation of meteorological data: **Hours: 15**

1. Simple line and Poly line Graph.
2. Bar Graph- Vertical and Horizontal.
3. Climograph, Hyther graph and Ergo Graph.

UNIT-III: Interpretation of Indian daily weather charts : **Hours: 15**

1. Introduction of weather map- conventional symbol and sign.
2. Observation and interpretation of departure of maximum and minimum temperature from Normal temperature.
3. Observation and interpretation of Indian Daily Weather Charts- Pressure condition and Pressure Gradients.
4. Observation and interpretation of Indian Daily Weather Charts- Wind direction and Wind Velocity.
5. Observation and interpretation of Indian Daily Weather Charts- Cloud conditions. Precipitation, Sea condition and Weather forecast.

(Interpretation shall be made on at least Two seasons- Rainy, Winter and Summer seasons).

Program Name	BA / BSc in Geography	Semester	III
Course Title	**Human Geography**		
Course Code:	DSCGE311	No. of Credits	3
Contact hours	52 Hours (4/week)	Duration of SEA/Exam	3 hours
Formative Assessment Marks	20	Summative Assessment Marks	80

Course Outcomes (COs): After the successful completion of the course, the student will be able to:

CO 1. Define key concepts, models, and approaches in human and settlement geography using appropriate geographic terminology.

CO 2. Explain the interrelationships between environmentalism, cultural regions, and demographic factors in shaping human geography.

CO 3. Apply locational analysis and quantitative indices to case studies like Bangalore's CBD, human development, and rural-urban dynamics.

CO 4. Analyze population dynamics and settlement patterns by comparing migration theories and central place hierarchies in urban and rural contexts

CO 5. Evaluate the sustainability of urbanization policies and create proposals for improving social well-being and environmental impact in local settings.

Syllabus	52 Hrs
Perspectives in Human Geography: Areal Differentiation; Regional Synthesis; Dichotomy and Dualism; Environmentalism, Quantitative Revolution and Locational Analysis; Radical, Behavioural, Human and Welfare Approaches; Languages, Religions (Hinduism, Christianity, Islam and Buddhism) and Secularisation; Cultural Regions of the World; Human Development Index.	14
Settlement Geography: Types and Patterns of Rural Settlements; Environmental Issues in Rural Settlements; Hierarchy of Urban Settlements; Urban Morphology; Concept of Primate City and Rank-Size Rule; Functional Classification of Towns; Sphere of Urban Influence; Rural-Urban Fringe; Satellite Towns; Problems and Remedies of Urbanization; Sustainable Development of Cities. ***Case Study:*** Changing Rural Settlement Patterns and Environmental Challenges – A Study of a Village in Bangalore Rural District / Urban Morphology and Functional Classification of Towns – A Study of Bangalore Central Business District (CBD) / Human Development Index at Ward Level – A Micro Analysis in Bangalore's Peripheral Areas	14
Population Geography: Growth and Distribution of World Population; Demographic Attributes; Causes and Consequences of Migration; Concepts of Over-Under-and Optimum Population; World Population Problems and Policies, Social Well-Being and Quality of Life; Population as Social Capital.	12
Models, Theories and Laws in Human Geography: System Analysis in Human Geography; Malthusian, Marxian and Demographic Transition Models; Central Place Theories of Christaller and Losch; Perroux and Boudeville; Von Thunen's Model of Agricultural Location; Weber's Model of Industrial Location; Rostov's Model of Stages of Growth. Heartland And Rimland Theories; Laws of International Boundaries and Frontiers. ***Field Study:*** Migration Patterns and Quality of Life in Urban Slums – A Case Study in Bangalore / Population Density and Demographic Transition – A Ward-Level Analysis in Bangalore / Central Place Hierarchy and Urban Services – A Study of Towns around Bangalore.	12

References

1. Castree, Noel, et al., editors. *A Companion to Environmental Geography*. Wiley-Blackwell, 2016.
2. Daniels, Peter, et al. *Human Geography: Issues for the 21st Century*. Pearson, 2003.
3. de Blij, Harm J. *Human and Economic Geography*. Macmillan, 1992.
4. Dickens, F. E., and J. A. Pitts. *Introduction to Human Geography*. 1963.
5. Fouberg, Erin H. *Human Geography: People, Place, and Culture*. 13th ed., Wiley, 2020.
6. Hopkinson, M. F. *The Geography of Settlement*. Oliver & Boyd, 1989.
7. Hussain, Majid. *Human Geography*. Rawat Publications, 2003.
8. Johnston, R. J., Gregory, Derek, Pratt, Geraldine, and Michael Watts, editors. *The Dictionary of Human Geography*. 5th ed., Blackwell Publishing, 2008.
9. Jordan-Bychkov, Terry G., et al. *The Human Mosaic: A Thematic Introduction to Cultural Geography*. 11th ed., W. H. Freeman and Company, 2006.
10. Knox, Paul L., and Sallie A. Marston. *Human Geography: Places and Regions in Global Context*. 8th ed., Pearson, 2021.
11. Nellson, Gabler, and Vining. *Human Geography: People, Cultures and Landscapes*. 1995.
12. Ranganath, Dr. *Manava Bhugola Shastra (Principles of Human Geography – Kannada)*. Vidyanidhi Publications, Gadag.
13. Smith, David M. *Geography, Inequality and Society*. Routledge, 2017.
14. Sui, Daniel Z., and Michael F. Goodchild. *The GIS Guide to Public Domain Data*. Esri Press, 2014. *(Useful for quantitative and locational analysis)*
15. Warf, Barney. *Global Geographies of the Internet*. Springer, 2020.

Program Name	BA / BSc in Geography	Semester	III
Course Title	**Map Projections**	Practical Credits	02
Course Code	DSCGEP311	Contact Hours	52 Hours (4/week)
Formative Assessment	10 Marks	Summative Assessment	40 Marks

Course Outcomes (COs): After the successful completion of the course, the student will be able to.

CO 1. Define and classify map projections based on type, surface, and preserved properties.

CO 2. Explain the concepts and uses of cylindrical, conical, and zenithal projections.

CO 3. Construct selected projections using graphical or mathematical techniques

CO 4. Compare distortions in different projections and assess their suitability for various purposes.

CO 5. Select and justify appropriate projections for thematic and topographic mapping tasks.

Exercise 1. Map Projections – Definition, Classification and Importance

Exercise 2. Cylindrical Projection – Simple Cylindrical, Cylindrical Equal Area, Mercator's Projections.

Exercise 3. Conical Projections - Simple Conical Projections, Conical Projection with Two Standard Parallels, Bonne's Projection, Polyconic Projection.

Exercise 4. Zenithal Projections – Polar Case, Zenithal Equidistant Equal Area, Zenithal Gnomonic, Zenithal Stereographic, Zenithal Orthographic.

Exercise 5. Conventional Projections – Sinusoidal Projection, Mollweide Projection.

References

1. Crampton, Jeremy W. *Mapping: A Critical Introduction to Cartography and GIS*. Wiley-Blackwell, 2010.
2. Field, Kenneth. *Cartography*. Esri Press, 2018.
3. Kellaway, George P. *Map Projections*. Methuen & Co. Ltd., London.
4. Kimerling, Jon, et al. *Map Use: Reading, Analysis, Interpretation*. 8th ed., Esri Press, 2020.
5. Mishra, R.P. *Fundamentals of Cartography*. Concept Publishing Company, 1982.
6. Monkhouse, F.J., and H.R. Wilkinson. *Maps and Diagrams*. Methuen & Co., 1971.
7. Raisz, Erwin. *General Cartography*. McGraw-Hill Book Company Inc., 1962.
8. Raisz, Erwin. *General Cartography*. McGraw-Hill, 1962.
9. Ranganath, and Mallappa. *Map Projections (Kannada Version)*. Chetana Book House, Mysore.
10. Robinson, Arthur H., et al. *Elements of Cartography*. 6th ed., Wiley, 1995.
11. Salar Massod, M. *Map Projections*. Roa and Raghavam Co., Mysore.
12. Sarkar, A. *Practical Geography: A Systematic Approach*. Orient BlackSwan, 2015.
13. Singh, Gopal. *Mapwork and Practical Geography*. Surjeet Book Depot, New Delhi.
14. Singh, R. L. *Elements of Practical Geography*. Student's Friends, Allahabad.
15. Slocum, Terry A., et al. *Thematic Cartography and Geovisualization*. 4th ed., Pearson, 2022.
16. Tyner, Judith A. *Principles of Map Design*. 2nd ed., Guilford Press, 2019.

Formative Assessment for Theory

Assessment type	Marks
Sessional Tests	10
Seminars / Presentations / Assignment / Case study / Field-Study / Project work etc.	10
Total	**20 Marks**

Formative Assessment for Practical

Assessment type	Marks
Sessional Tests-1/Lab Activity	05
Case study / Field-Study / Project work etc.	05
Total	**10 Marks**

Program Name	BA / BSc in Geography	Semester	III
Course Title	**(Elective 1) Introduction to Physical Geography**		
Course Code:	ELGE 3.1	No. of Credits	3
Contact hours	40 Hours (3/week)	Duration of SEA/Exam	3 hours
Formative Assessment Marks	20	Summative Assessment Marks	80
Formative Assessment Marks	20	Summative Assessment Marks	80

Course Outcomes (COs): After the successful completion of the course, the student will be able to

CO 1. *Explain* the origin, shape, size, and movements of the Earth and their geographical implications.

CO 2. *illustrate* the Earth's internal structure and processes like plate tectonics, volcanism, and earthquakes.

CO 3. *Classify* various types of rocks, soils, and weathering processes and *evaluate* their significance in landscape development.

CO 4. *Interpret* the structure and composition of the atmosphere, along with spatial patterns of temperature, pressure, and rainfall.

CO 5. *Assess* oceanic features including sea-floor topography, temperature, salinity, currents, tides, and their global climatic roles.

Syllabus	40 Hrs
Geodesy - Solar System; Origin, Shape and Size of the Earth, Movement of the Earth - Rotation and Revolution, Effects of the movement of Earth, Coordinates - Latitude, Longitude and Time.	10
Geomorphology - Structure of the Earth; Plate tectonics; Rocks - types, significance; Weathering –types; Soil – Formation and Types; Volcanicity; Earthquakes and Tsunamis	10
Climatology - Weather and Climate; Structure and Composition of the Atmosphere; Atmospheric Temperature – determining factors and distribution; Atmospheric Pressure; Winds and Rainfall – Types.	10
Oceanography - Distribution of Land and Sea; Bottom Relief of the Ocean; Temperature and Salinity of Sea Water; Ocean Tides; Waves; Ocean currents - Atlantic, Pacific and Indian Oceans.	10

References

1. B.S. Negi (1993) Physical Geography. S.J. Publication, Meerut
2. Barry, Roger G., and Richard J. Chorley. *Atmosphere, Weather and Climate*. 10th ed., Routledge, 2021.
3. Critchfield, Howard J. *General Climatology*. 5th ed., Pearson India, 2021.
4. D.S. Lal (1998) Climatology. Chaitnya publishing house, Allahabad
5. Garrison, Tom. *Essentials of Oceanography*. 13th ed., Cengage Learning, 2021
6. K. Siddhartha (2001) Atmosphere, Weather and Climate. Kisalaya publication, New Delhi
7. Lutgens, Frederick K., Edward J. Tarbuck, and Dennis G. Tasa. *The Atmosphere: An Introduction to Meteorology*. 14th ed., Pearson, 2019.
8. Marshak, Stephen. *Earth: Portrait of a Planet*. 6th ed., W. W. Norton & Company, 2019.
9. Press, Frank, and Raymond Siever. *Understanding Earth*. 7th ed., Macmillan Learning, 2019.
10. R.N. Tikka (2002) Physical Geography. Kedarnath Ramnath & co, Meerut
11. Skinner, Brian J., and Stephen C. Porter. *The Dynamic Earth: An Introduction to Physical Geology*. 6th ed., Wiley, 2020.
12. Strahler, Arthur N., and Alan H. Strahler. *Introducing Physical Geography*. 6th ed., Wiley, 2020.

Formative Assessment for Theory	
Assessment type	**Marks**
Sessional Tests	10
Seminars / Presentations / Assignment	10
Total	**20 Marks**

Program Name	BA / BSc in Geography	Semester	III
Course Title	**(Elective 2) Introduction to Karnataka Geography**		
Course Code:	ELGE 3.2	No. of Credits	3
Contact hours	40 Hours (3/week)	Duration of SEA/Exam	3 hours
Formative Assessment Marks	20	Summative Assessment Marks	80
Formative Assessment Marks	20	Summative Assessment Marks	80

Course Outcomes (COs): After the successful completion of the course, the student will be able to:

CO 1. *Describe* Karnataka's physical setting, including relief, drainage, soil types, forests, and climate.

CO 2. *Analyse* the regional distribution and significance of major food, commercial, and plantation crops in Karnataka.

CO 3. *Evaluate* the role of river valley projects in the development of agriculture and irrigation in Karnataka.

CO 4. *Classify and compare* the mineral resources and industrial development across different regions of Karnataka.

CO 5. *Interpret* the patterns of transport infrastructure and population distribution with reference to major urban centres.

Syllabus	40 Hrs
Physical Setting - Location and Extent, Relief Features, Drainage System and Climate. Soil – Types and Distribution; Forest resources – Types and Wildlife Sanctuaries	10
Agriculture - Food Crops – Ragi, Paddy and Jowar, Commercial Crops- Cotton and Sugarcane and Plantation Crops- Coffee; Major River Valley Projects – Krishna, Tungabhadra, Upper Krishna and KRS	10
Minerals and Industries - Iron ore, Manganese, Gold and Copper; Growth and Development of Industries -, Iron and Steel, Silk, Sugar, Cement and Software Industry.	10
Transportation and Population - Distribution of Roadways, Railways, Airways and Waterways; Major ports and harbours; Growth, Density and Distribution of Population; Major Urban Centres – Bangalore, Mysore, Hubli, Dharwad and Mangalore.	10

References

1. Achyuthi Rao T.N.: Planning Regions of Karnataka
2. Economic Survey of Karnataka-Annual publication by Govt. of Karnataka.
3. Geetha, N. *Urbanisation in Karnataka: Issues and Trends*. NIRDPR Publications, 2022.
4. Government of Karnataka. *Karnataka at a Glance: Statistical Handbook 2022*. Department of Planning, 2022.
5. Gowda, K. M. *Karnataka: A Regional Geography*. 2nd ed., University of Mysore, 2020.
6. Hegde, G. M. *Karnataka Environment and Forest Resources*. Vikas Prakashana, 2023. *(Kannada)*
7. Mallappa, P. *Karnatakada Bhugola*. 5th ed., Sapna Book House, 2022. *(Kannada)*
8. Murthy, M. V. *Drainage and River Systems of Karnataka*. Vijaya Publications, 2019.
9. N.B.K.Reddy and Murthy: Regional Geography of Karnataka.
10. Prasad, S. K. *Economic Geography of Karnataka*. Prasaranga, Karnataka University Dharwad, 2020.
11. R.P.Mishra: Geography of Mysore- National Book Trust, New Delhi.
12. Ranganath, B. K. *Karnataka Geography* 4th ed., Sapna Book House, 2021. *(Kannada-English Bilingual)*
13. Satish, T. N. *Karnatakada Krushi Mattu Udyamashilathe*. Vidya Pustaka, 2021. *(Kannada)*
14. Sharma, S. C. *Transport and Communication in Karnataka*. Himalaya Publishing House, 2020.

Formative Assessment for Theory	
Assessment type	**Marks**
Sessional Tests	10
Seminars / Presentations / Assignment	10
Total	**20 Marks**

Program Name	BA / BSc in Geography		Semester	IV
Course Title	**Geography of India**			
Course Code:	DSCGE411		No. of Credits	03
Contact hours	52 Hours (4/week)		Duration of SEA/Exam	3 hours
Formative Assessment Marks	20		Summative Assessment Marks	80
Formative Assessment Marks	20		Summative Assessment Marks	80

Course Outcomes (COs): After the successful completion of the course, the student will be able to:

CO 1. Identify India's physical features, monsoon systems, soil types, and climatic regions.

CO 2. Explain resource distribution and agricultural practices including green and white revolutions.

CO 3. Illustrate industrial development and transport networks using maps and field data.

CO 4. Assess regional disparities in infrastructure and economic development using spatial analysis.

CO 5. Propose sustainable development strategies for agriculture, industry, and transport sectors.

Syllabus	**52 Hrs**
Physical Setting: Space Relationship of India with Neighbouring Countries; Structure and Relief; Drainage System and Watersheds; Physiographic Regions; Mechanism of Indian Monsoons and Rainfall Patterns; Tropical Cyclones and Western Disturbances; Floods and Droughts; Climatic Regions; Natural Vegetation, Soil Types and Their Distributions.	16
Resources and Agriculture: Energy, Minerals, Biotic and Marine Resources, Forest and Wildlife Resources and Their Conservation; Energy Crisis. Agriculture Infrastructure: Irrigation, Seeds, Fertilizers, Power; Agro and Social-Forestry; Green Revolution and Its Socio-Economic and Ecological Implications; Significance of Dry Farming; Livestock Resources and White Revolution; Aqua-Culture; Sericulture, Apiculture and Poultry; Agro-Climatic Zones. ***Case Study:*** Impact of Monsoon Variability on Agriculture in Your District / Watershed Management and Soil Conservation in Your Taluk / Agro-Climatic Zoning and Crop Suitability in Your District	13
Industry: Evolution of Industries; Locational Factors of Cotton, Jute, Textile, Iron and Steel, Aluminum, Fertilizer, Paper, Chemical and Pharmaceutical, Automobile, Cottage and Ago-Based Industries; Industrial Regionalization; New Industrial Policy; Multinationals and Liberalization; Special Economic Zones; Tourism Including Ecotourism.	12
Transport, Communication and Trade Road, Railway, Waterway, Airway and Pipeline Networks and Their Complementary Roles in Regional Development; Growing Importance of Ports on National and Foreign Trade; Trade Balance; Trade Policy; Export Processing Zones; Developments in Communication and Information Technology and Their Impacts on Economy and Society; Indian Space Programme. ***Field Study:*** Industrial Cluster Mapping in Any Industrial Area in Bangalore / Role of Metro and Suburban Rail in Urban Mobility in Bangalore / Digital Divide and Communication Infrastructure in Bangalore Periphery Villages	11

References

1. Bhat, L. S. *Regional Planning in India*. Statistical Publishing Society, 2023.
2. Chand, Mahesh, and V. K. Puri. *Regional Planning in India*. Allied Publishers, 2020.
3. Dixit, R.S. *Economic Geography: A Study of Resources*. Rawat Publications, 2020.
4. Gopal Singh. *Map Work and Practical Geography*. Surjeet Publications, 2022.
5. Goudar, M. A. *Bharatada Krishi mattu Udyamashilathe*, Navakarnataka Publications, 2019.
6. Hussain, Majid. *Geography of India*. McGraw-Hill Education, 2023.
7. Ranganath, Dr. *Bharata Bhugola (Geography of India – Kannada)*. Vidyanidhi Publications, Gadag, 2020.
8. Sharma, P. D. *Ecology and Environment*. Rastogi Publications, 2021.
9. Sharma, T.C. *Economic and Commercial Geography of India*. Vikas Publishing, 2018.
10. Shinde, R. S. *Bharata Bhugola mattu Arthika Bhugola (Kannada)*. Sapna Book House, 2021.
11. Singh, Jagdish. *India: A Comprehensive Geography*. Gyanodaya Prakashan, 2022.
12. Singh, R. L. *India: A Regional Geography*. National Geographical Society of India, 2011.
13. Srivastava, H. N., and G. S. Tomar. *Transport Geography*. Discovery Publishing House, 2021.
14. Tiwari, R.C. *Geography of India*. Prayag Pustak Bhawan, 2022.
15. Tyagi, B.P. *Geography of Resources*. Jai Prakash Nath & Co., 2019.

Program Name	BA / BSc In Geography	Semester	IV
Course Title	**Cartographic Techniques**	Practical Credits	02
Course Code	DSCGEP411	Contact Hours	52 Hours (4/week)
Formative Assessment	10 Marks	Summative Assessment	40 Marks

Course Outcomes (COs): After the successful completion of the course, the student will be able to:

CO 1. *Define* and *describe* key concepts of cartography, map types, and marginal information.

CO 2. *Explain* and *apply* various types of map scales including graphical constructions.

CO 3. *Construct* and *differentiate* areal data representation techniques such as choropleth, flow maps, and cartograms.

CO 4. *Demonstrate* manual map enlargement and reduction using traditional and estimation-based methods.

CO 5. *Interpret* relief features through traditional representation techniques and *construct* manual profiles using contours and thread method.

Exercise 1. Cartography – Principles and Evolution. Map – Meaning, Types and Marginal Information.

Exercise 2. Scales – Concept; Representative Fraction and Verbal Scale; Conversion of Scales; Graphical Construction of Linear, Diagonal, Time, Pace and Flexible Strip Scales.

Exercise 3. Areal Data Representation– Dot, Proportional Circles, Sphere and Block Pile, Choropleth, Isopleths, Flow Maps, Cartogram Drawing (rubber sheet or square method)

Exercise 4. Enlargement And Reduction of Maps: Square and Triangular Method; Pantograph Use; Freehand Rescaling – practice using estimation and proportional division

Exercise 5. Relief Features – Traditional Methods: Pictorial (Hill Shading, Hachures); Mathematical (Spot Heights, Benchmarks, Trig Points); Composite (Contours and Layer Tinting); Contours: Characteristics, Interpretation, and Profile Drawing; Manual Construction of Transect Profiles using Thread Method

References

1. Anson, R. & Ormeling, F.J. – International Cartographic Manual
2. Crampton, Jeremy W. *Mapping: A Critical Introduction to Cartography and GIS*. Wiley-Blackwell, 2010.
3. Field, Kenneth. *Cartography*. Esri Press, 2018.
4. Keates, J.S. – Understanding Maps, Longman
5. Kimerling, Jon, et al. *Map Use: Reading, Analysis, Interpretation*. 8th ed., Esri Press, 2020.
6. Mishra, R.P. *Fundamentals of Cartography*. Concept Publishing Company, 1982.
7. Monkhouse, F.J., and H.R. Wilkinson. *Maps and Diagrams*. Methuen & Co., 1971.
8. Raisz, Erwin. *General Cartography*. McGraw-Hill Book Company Inc., 1962.
9. Ranganath, B. – Cartography and Surveying, Vidhyanidhi Prakashana (Kannada & English)
10. Robinson, Arthur H., et al. *Elements of Cartography*. 6th ed., Wiley, 1995.
11. Sarkar, A. *Practical Geography: A Systematic Approach*. Orient BlackSwan, 2015.
12. Singh, R. L. *Elements of Practical Geography*. Student's Friends, Allahabad.
13. Slocum, Terry A., et al. *Thematic Cartography and Geovisualization*. 4th ed., Pearson, 2022.
14. Tyner, Judith A. *Principles of Map Design*. 2nd ed., Guilford Press, 2019.

Formative Assessment for Theory	
Assessment type	**Marks**
Sessional Tests	10
Seminars / Presentations / Assignment / Case study / Field-Study / Project work etc.	10
Total	**20 Marks**

Formative Assessment for Practical	
Assessment type	**Marks**
Sessional Tests-1/Lab Activity	05
Case study / **Field-Study** / Project work etc.	05
Total	**10 Marks**

Program Name	BA / BSc in Geography	Semester	IV
Course Title	**(Elective 1) Introduction to Indian Geography**		
Course Code:	ELGE 4.1	No. of Credits	3
Contact hours	40 Hours (3/week)	Duration of SEA/Exam	3 hours
Formative Assessment Marks	20	Summative Assessment Marks	80
Formative Assessment Marks	20	Summative Assessment Marks	80

Course Outcomes (COs): After the successful completion of the course, the student will be able to:

CO 1. *Describe* the physical features of India including relief, drainage, soils, forests, and climate.

CO 2. *Differentiate* the types and distribution of major crops, irrigation methods, and evaluate the importance of river valley projects.

CO 3. *Classify* mineral resources and *examine* the locational factors influencing the development of Indian industries

CO 4. *Interpret* the development and distribution of transportation networks and major ports across India.

CO 5. *Assess* the spatial patterns of population, urbanization, and the challenges related to urban growth

Syllabus	40 Hrs
Physical Setting - Location and Extent, Relief Features, Drainage System and Climate. Soil – Types and Distribution; Forest Resources – Types and Conservation; Animal Conservation.	10
Agriculture - Food Crops – Paddy and Wheat, Commercial Crops- Cotton and Sugarcane, Plantation Crops- Coffee and Tea; Major River Valley Projects – DVC, Bhakra Nangal, Hirakud; Irrigation Types and Distribution	10
Minerals and Industries - Iron ore, Manganese, Gold and Copper; Coal and Petroleum; Growth, Development and Locational Factors of Industries - Iron and Steel, Aluminium, Cotton, Sugar, Cement Industry.	10
Transportation and Population - Distribution of Roadways, Railways, Airways and Waterways; Major ports and Harbours; Growth, Density and Distribution of Population; Urbanisation and Problems.	10

References

1. Bhat, L. S. *Regional Planning in India*. Statistical Publishing Society, 2023.
2. Chand, Mahesh, and V. K. Puri. *Regional Planning in India*. Allied Publishers, 2020.
3. Dixit, R.S. *Economic Geography: A Study of Resources*. Rawat Publications, 2020.
4. Gopal Singh. *Map Work and Practical Geography*. Surjeet Publications, 2022.
5. Goudar, M. A. *Bharatada Krishi mattu Udyamashilathe*, Navakarnataka Publications, 2019.
6. Hussain, Majid. *Geography of India*. McGraw-Hill Education, 2023.
7. Ranganath, Dr. *Bharata Bhugola (Geography of India – Kannada)*. Vidyanidhi Publications, Gadag, 2020.
8. Sharma, P. D. *Ecology and Environment*. Rastogi Publications, 2021.
9. Sharma, T.C. *Economic and Commercial Geography of India*. Vikas Publishing, 2018.
10. Shinde, R. S. *Bharata Bhugola mattu Arthika Bhugola (Kannada)*. Sapna Book House, 2021.
11. Singh, Jagdish. *India: A Comprehensive Geography*. Gyanodaya Prakashan, 2022.
12. Singh, R. L. *India: A Regional Geography*. National Geographical Society of India, 2011.
13. Srivastava, H. N., and G. S. Tomar. *Transport Geography*. Discovery Publishing House, 2021.
14. Tiwari, R.C. *Geography of India*. Prayag Pustak Bhawan, 2022.
15. Tyagi, B.P. *Geography of Resources*. Jai Prakash Nath & Co., 2019.

Formative Assessment for Theory	
Assessment type	**Marks**
Sessional Tests	10
Seminars / Presentations / Assignment	10
Total	**20 Marks**

Program Name	BA / BSc in Geography	Semester	IV
Course Title	**(Elective 2) Introduction to World Regional Geography**		
Course Code:	ELGE 4.2	No. of Credits	3
Contact hours	40 Hours (3/week)	Duration of SEA/Exam	3 hours
Formative Assessment Marks	20	Summative Assessment Marks	80
Formative Assessment Marks	20	Summative Assessment Marks	80

Course Outcomes (COs): After the successful completion of the course, the student will be able to:

CO 1. *Identify and describe* major physical features and climatic regions of the world using Koppen's classification.

CO 2. *Classify* global vegetation types, soils, and agricultural patterns and *analyse* their spatial distribution.

CO 3. *Examine* the factors influencing the distribution of industries and transportation routes across the globe.

CO 4. *Evaluate* global population trends, distribution, urbanisation patterns, and associated challenges like slums.

CO 5. *Interpret* global interlinkages of river systems, trade routes, and urban centres with reference to economic geography.

Syllabus	40 Hrs
Physical Setting - Major Mountains, Plateaux and Plains. Major Climatic Regions of the World, Based on Koppen's Classification. Major River Systems of the World.	10
Resources - Natural Vegetation - Types and Distribution; Soils – Types and Distribution; Agriculture - Influencing Factors, Types and Distribution. Major Crops and Distribution.	10
Industry and Transportation - Industrial Regions of the World - Factors of Industrial Concentrations; Major Railway Routes, Waterways; Canals – Suez and Panama; Major Ports and Sea Routes.	10
Population and Urbanisation – Population - Growth, Distribution and Density; Problems of Population; Evolution of Cities; Major Metropolitan Cities and Megalopolis of the World. Urbanisation and Problems; Slums.	10

References

1. Jackson, Peter. *Global Geography: Places and People in a Globalised World*. Routledge, 2021.
2. Blij, Harm J. de, and Peter O. Muller. *Geography: Realms, Regions and Concepts*. 18th ed., Wiley, 2022.
3. Fellmann, Jerome D., et al. *Human Geography: Landscapes of Human Activities*. 14th ed., McGraw Hill, 2023.
4. Bradshaw, Michael, and Joseph Dymond. *World Regional Geography: Global Patterns, Local Lives*. 8th ed., McGraw Hill, 2022.
5. Clawson, Marion. *World Agricultural Regions and Their Problems*. The World Bank Publications, 2020.
6. Ramesh, D. S. *Vishwa Bhugola mattu Pramukha Parisaragala Viniyoga*. Sapna Book House, 2021. *(Kannada)*
7. Pradeep, B. *Vishwa Bhugola: Pramukha Shaktikendra Mattu Vikasashiladeshagalu*. Navakarnataka Publications, 2023. *(Kannada)*
8. Dhar, S. C. *Population Geography of the World*. Mittal Publications, 2020.
9. Dutta, R. L. *Economic Geography: Resources and Development of the World*. Rajat Publications, 2021.
10. Murthy, H. V. *Jagathika Nagarikarana mattu Janasankhye Samasyegalu*. Vidyanidhi Prakashana, 2023. *(Kannada)*

Formative Assessment for Theory	
Assessment type	**Marks**
Sessional Tests	10
Seminars / Presentations / Assignment	10
Total	**20 Marks**

Scheme of Valuation: Theory

CONTACT HOURS/ WEEK	CREDITS	Scheme of Valuation: Max. Marks: 100	
		Continues Internal Assessment (IA)	Semester End Exam (SEE)
DSC – 05 Hours	03	C1-TEST-10 MARKS C2- ASSIGNMENT/FIELD ACTIVITIES-10 MARKS	C3-80 MARKS
DSC – 03 Hours	03	C1-TEST-10 MARKS C2- ASSIGNMENT/FIELD ACTIVITIES-10 MARKS	C3-80 MARKS

Scheme of Valuation: Practical

CONTACT HOURS/ WEEK	CREDITS	Scheme of Valuation: Max. Marks: 50	
		Continues Internal Assessment (IA)	Semester End Exam (SEE)
04	02	C1-TEST-05 MARKS C2- TEST-05MARKS	C3-40 MARKS

DISTRIBUTION OF C3 MARKS: Practical

Total Duration of Practical Exam: 03 Hours

Section	Marks
Unit-1 (Practical Question)	10 marks
Unit-2 (Practical Question)	10 marks
Unit-3 (Practical Question)	10 marks
Record (Duly Certified Practical Record)	10 marks
Total	**40 marks**

- **Practical classes will be conducted in batches. Each batch will consist of**
  1. **1 to 19 students supervised by one teacher.**
  2. **20 to 29 students supervised by two teachers.**
- **In each semester 75% attendance is compulsory for both theory and practical classes.**

Prof.SHARADAMMA.S.B
Chairman
BOS in Geography (UG)
Tumkur University, Tumkur

TUMKUR UNIVERSITY, TUMKUR
Bachelors of Arts and Science
Subject: GEOGRAPHY
QUESTION PAPER PATTERN -2024-25 Batches Onwards

Instructions:

1. Answer all parts.
2. Draw maps and diagram wherever necessary.

Time: 03 hours **Max Marks: 80**

PART-A

I. Answer any Five questions of the following. 5 X 2= 10

1.
2.
3.
4.
5.
6.
7.

PART-B

II. Answer any Six questions of the following. 6 X 5= 30

8.
9.
10.
11.
12.
13.
14.
15.

PART-C

III. Answer any Four questions of the following. 4 X 10= 40

16.
17.
18.
19.
20.
21.

Prof.SHARADAMMA.S.B
Chairman
BOS in Geography (UG)
Tumkur University, Tumkur