

AC: 8.8

Item No.



**Rayat Shikshan Sanstha's
KARMAVEER BHURAO PATIL COLLEGE, VASHI,
AUTONOMOUS COLLEGE**

Sector-15- A, Vashi, Navi Mumbai -400 703

NAAC Grade "A+" with CGPA 3.53

Choice Based Credit System Syllabus

Program: M.A.- I

Course: Geography

Semester: I and II

**(As per Choice Based Credit System (CBCS)
with effect from the academic year 2021-22)**

Karmaveer Bhaurao Patil College Vashi, Navi Mumbai

Autonomous College

[University of Mumbai]

Syllabus for Approval

Sr. No.	Heading	Particulars
1	Title of Course	M.A. Part-I. Sem.-II Geography
2	Eligibility for Admission	B.A. Geography Degree
3	Passing Marks	40%
4	Ordinances/Regulations (if any)	
5	No. of Years/Semesters	One year/Two semester
6	Level	P.G.
7	Pattern	Semester
8	Status	CBCS
9	To be implemented from Academic year	2021-22

Rayat Shikshan Sanstha's
Karmaveer Bhaurao Patil College, Vashi
 (Autonomous College)
Department of Geography
Program: M.A Part- I

Details of Semester wise Course and Credits

Course No.	Course Title	Course Type	Course Code	CIE Marks	SEE Marks	Total	Credit Points
Semester I							
1.1	Principles of Geomorphology	Core Course	PGGEO101	40	60	100	6
1.2	Principals of Climatology	Core Course	PGGEO102	40	60	100	6
1.3	Research Methodology-I	Core Course	PGGEO103	40	60	100	6
1.4	Tools And Techniques of Spatial Analysis- I	DSE	PGGEO104A	40	60	100	6
	OR						
	Urban Geography	DSE	PGGEO104B	40	60	100	6
1.5	Introduction to Geographic Information System and Global Positioning System	SEC	PGGEO105	40	60	100	6
Total						500	30
Semester II							
2.1	Economic Geography	Core Course	PGGEO201	40	60	100	6
2.2	Population Geography	Core Course	PGGEO202	40	60	100	6
2.3	Research Methodology-II	Core Course	PGGEO203	40	60	100	6
2.4	Tools and Techniques of Spatial Analysis- II	DSE	PGGEO204A	40	60	100	6
	OR						
	Tropical Geomorphology	DSE	PGGEO204B	40	60	100	6
2.5	Applied Course of Travel & Tourism	SEC	PGGEO205	40	60	100	6
Total						500	30

Draft Syllabus Under Autonomy

For M.A. Programme at Semester I & II
with effect from the Academic Year 2020-21

PRINCIPLES OF GEOMORPHOLOGY

Course Outcome: After the completion of course, the students will have ability to:

1. Understand the functioning of Earth systems in real time and analyze how the natural and anthropogenic operating factors affect the development of landforms. [1]
2. Distinguish between the mechanisms that control these processes. [4]
3. Assess the role of structure, stage and time in shaping the landforms. [5]
4. Interpret geomorphological maps and apply the knowledge in geographical research. [6]

Modules at a Glance

PRINCIPLES OF GEOMORPHOLOGY

Unit No.	Unit	Unit Wise Weightage of Marks (in %)
1	Introduction to Geomorphology	15
2	Interior of the Earth and Endogenetic Movements	15
3	Exogenetic Processes	15
4	Cycle of Erosion and Slope Development	15

M.A. PART-I GEOGRAPHY CBCS SYLLABUS 2021-22
SEMESTER-I
CORE COURSE

M. A. GEOGRAPHY PAPER-I		
PRINCIPLES OF GEOMORPHOLOGY		
SEMESTER:I	COURSE CODE: PGGEO101,	CREDITS:6
Teaching Hours 60 + Notional Hours 60 = Total hours 120		

Units	Name of the Sub Topic	No of Lectures
Unit- I Introduction to Geomorphology		
1.1	Nature, scope and content of Geomorphology	15
1.2	Geological Evolution of Earth and Geological time scale	
1.3	Development of geomorphic thought, Catastrophism, Uniformitarianism, Neocatastrophism	
Unit – II Interior of the Earth and Endogenetic Movements		
2.1	Constitution of the earth's interior	15
2.2	Continental Drift Theory- Sea Floor spreading- Plate Tectonic	
2.3	Geosynclines: Geosynclines Theory of Kobber, Holmes' Convection Current Theory, Theories of Isostasy	
2.4	Endogenetic movements- types, consequences (earthquakes and volcanoes) and landforms	
Unit – III Exogenetic Processes		
3.1	Fluvial Geomorphic system: processes and resulting landforms	15
3.2	Glacial Geomorphic system: geomorphic processes and features	
3.3	Karsts landscape: development and processes	
3.4	Aeolian Geomorphic system: processes and landforms	
3.5	Coastal Geomorphic system: processes and landforms	
Unit-IV Cycle of Erosion and Slope Development		
4.1	Landscape evolution – Davisian Model of Cycle of Erosion	15
4.2	Slope development and related theories: W. M. Davis	

Note 1. Yellow Highlighted Topic / Course is related to professional ethics, gender, human values, Environment & sustainability
2. Green Highlighted Topic / Course is related to local/national/regional & global development needs.

REFERENCES:

1. Anhert, F., (1996), „Introduction to Geomorphology“, Arnold, London, Sydney, Aukland.
2. Bloom, A. L. (2002), „Geomorphology: A Systematic Analysis of Late Cenozoic Landforms“, Pearson Education Pvt. Ltd., and Singapore.
3. Christopherson, R.W. (1994), „Geosystems : An Introduction to Physical Geography“, Macmillan College publishing Company, New York.
4. Dayal, P. (1990), „A Textbook of Geomorphology“, Shukla Book Depot, Patna.
5. Engeln, O. D. Von (1944), „Geomorphology“, The Macmillan Company, New York.
6. Fairbridge R. W. (1968) (ed.), „Encyclopaedia of Geomorphology“, Reinhold, New York.
7. Mitchell, C. E. (1973), „Terrain Evaluation“, Longmans, London.
8. Ritter, D.F., Kochel, R.C., Miller, J.R. (1995), „ Process Geomorphology“, Wim. C. Brown Publishers, Chicago.
9. Sparks, B.W. (1988), „An Introduction to Geomorphology“, Longman, London. 10. Strahler A. (1996), „Physical Geography: Science and System of the HumanEnvironment“, John Willey, New York.

Core Course (CC)
Principles of Climatology

Course Outcome: After the completion of course, the students will have ability to:

1. Understand the elements of weather and climate and its impacts at different scales. [2]
2. Explain the thermodynamic process of atmosphere. [4]
3. Analyze the global distribution of climatic phenomena [6]
4. Predict the behaviour of climatic parameters. [5]

Modules at a Glance
PRINCIPLES OF CLIMATOLOGY

Unit No.	Unit	Unit Wise Weightage of Marks (in %)
1	Introduction to Climatology	15
2	Insolation and Distribution of Temperature	15
3	Atmospheric pressure and Winds	15
4	Air Masses and Fronts	15

M. A. GEOGRAPHY PAPER-II

PRINCIPLES OF CLIMATOLOGY

SEMESTER:I COURSE CODE: PGGEO102, CREDITS:6

Teaching Hours 60 + Notional Hours 60 = Total hours 120

Units	Name of the Sub Topic	No of Lectures
Unit – I Introduction to Climatology		
1.1	Nature and scope of Climatology	15
1.2	Relationship of Climatology with Meteorology	
1.3	Structure and composition of Atmosphere	
1.4	Weather elements and climatic controls	
Unit – II Insolation and Distribution of Temperature		
2.1	Insolation and heat balance of the Earth	15
2.2	Temperature - Vertical, horizontal and seasonal variations	
2.3	Processes of heat energy transport	
2.4	Inversion of temperature	
Unit – III Atmospheric pressure and Winds		
3.1	Atmospheric pressure – vertical and horizontal distribution	15
3.2	General Circulation of atmosphere	
3.3	Types of winds – Geotropic, Gradient and local winds	
3.4	Origin of Monsoon: classical and recent views,	
Unit – IV Air Masses and Fronts		
4.1	Air masses: Origin, classification, types	15
4.2	Fronts: frontogenesis and frontolysis- classification of fronts	
4.3	Extra-tropical cyclones: formation and impacts	
4.4	Climatic Classification: Koppen and Thornthwaite, concept of water balance problems and prospects	
Yellow Highlighted Topic / Course is related to professional ethics, gender, human values, Environment & sustainability		

REFERENCES:

1. Barry, R.S. & Chorley, R.J. (1971): Atmosphere, Weather and Climate, ELBS, Methuen & Co. Ltd., U.S.A.
2. Griffiths, J.F.(1966): Applied Climatology-An Introduction, Oxford University Press, London.
3. Lal, D.S.(1997):Climatology, ShardaPustakBhawan, Allahabad.
4. Mather, J. R.(1974): Climatology: Fundamentals and Applications, McGraw Hill Book Co. New York.
5. McBoyle, G.(1973): Climate in Review, Houghton Mifflin Co., Boston.
6. Subrahmanyam, V.P.(ed)(1983):Contribution to Indian Geography, Heritage Publishers, New Delhi ,
a) Vol. III - General Climatology b) Vol. IV- Applied Climatology
7. Harp, H.J. and Trinidade, O.D. (eds) (1990): Climate and Development, Springer Verlag, U.S.A. 8.
- Oliver, J.E. and Hidose, J.J. (1984): Climatology - An Introduction, Charles and Merrill, U.S.A.
8. Robinson, P.J. and Hendersen-Sellers, A.(1999): Contemporary Climatology, Pearson Education, London

Discipline Specific Elective (DSC)
TOOLS AND TECHNIQUES OF SPATIAL ANALYSIS- I
(Practical Paper)

Course Outcome: After successfully completion of this course, the students will be able to ...

1. Generate the longitudinal, Composite and Projected profile with the help of contour maps. [6]
2. Construct the diagrams for the altimetric analysis and justify the answers. [6]
3. Understand the physical and chemical properties of Soil. [2]
4. Evaluate the climatic data using statistical techniques. [5]

Modules at a Glance
TOOLS AND TECHNIQUES OF SPATIAL ANALYSIS- I

Unit No.	Unit	Unit Wise Weightage of Marks (in %)
1	Techniques of Geomorphic Analysis	15
2	Techniques of Soil Analysis	15
3	Techniques of Climatic Data Analysis	15

M. A. GEOGRAPHY PRACTICAL PAPER

TOOLS AND TECHNIQUES OF SPATIAL ANALYSIS- I

SEMESTER:I COURSE CODE:PGGEO103, CREDITS:6

Teaching Hours 60 + Notional Hours 60 = Total hours 120

Units	Name of the Sub Topic	No of Lectures
Unit – I Techniques of Geomorphic Analysis		20
1.1 A	Drawing Profiles:	
1.1.1	Longitudinal	
1.1.2	Composite and Projected	
1.2 B	Methods of Slope Analysis	
1.2.1	Wentworth’s method of average slope determination	
1.2.2	Robison’s method of slope analysis’	
1.2.3	G. H. Smith’s method of slope analysis	
1.2.4	Construction of Block Diagram	
1.3 C	Altimetric Analysis	
1.3.1	Ring contour method	
1.3.2	Highest grid-cell elevation method	
Unit- II Techniques of Soil Analysis		20
2.1	Textural analysis	
2.2	Chemical Analysis – pH and moisture determination	
Unit – III Techniques of Climatic Data Analysis		20
3.1	Rainfall dispersion diagrams	
3.2	Wind roses	
3.3	Water surplus-deficiency graphs	
3.4	Climatograph	
3.5	Climograph: Hyther graph, Taylor’s climograph	
3.6	Index of aridity and index of moisture	
Blue Highlighted Topic / Course has focus on employability/ entrepreneurship/skill development		

REFERENCES:

1. King, C. A. M. (1978): Techniques in Geomorphology, Edward Arnold, London.
2. Miller, A.A. (1966): The Skin of the Earth, Methuen, London.
3. Monkhouse, F.J. and Wilkinson, H.R. (1971): Maps and Diagrams, Methuen, London.
4. Cole, J.R and King , C.A.M. (1968): Quantitative Geography, John Wiley And Sons, London.
5. Goudie, A. (1981): Geomorphological Techniques, George Alien And Unwin, London.
6. Hammond, R. And McCullagh, P.S. (1974): Quantitative Techniques in Geography: An Introduction, Oxford University Press, London. MahmoodAslam (1977): Statistical Methods in Geographical Studies, Rejesh Publication, New Delhi.
7. Singh, Gopal (2001): Map Work and Practical Geography, Vikas Publishing House Pvt. Ltd.
8. Singh, L.R. (2011): Fundamentals of Practical Geography, ShardaPustakBhavan, Allahabad.
9. Singh, R.L. and Singh, R. B. (2004): Elements of Practical Geography, Kalyani Publishers, New Delhi – Ludhiana.

Core Course (CC)
RESEARCH METHODOLOGY

Course Objectives:

1. To develop the understanding of the basic concept of research
2. To develop the understanding of the basic framework of sampling and data collection
3. To develop the understanding of various sampling methods and techniques
4. To identify various sources of information for data collection.
5. Understanding of the conducting survey on various issues and develop the Report writing skill of students

Course Outcome:

1. Demonstrate the ability to choose methods appropriate to research aims and objectives
2. Understand the limitations of particular research methods
3. Develop skills in qualitative and quantitative data analysis and presentation
4. Develop advanced critical thinking skills
5. Demonstrate enhanced writing skills

Modules at a Glance
RESEARCH METHODOLOGY

Unit No.	Unit	Unit Wise Weightage of Marks (in %)
1	Introduction to Research Methodology	15
2	Research Problem and Research Design	15
3	Methods of Data Collection	15
4	Research Report Writing	15

M.A. FIRST YEAR (SEMESTER- I)**RESEARCH METHODOLOGY****COURSE CODE: PGGEO104A; COURSE CREDIT: 06**

Teaching Hours 60 + Notional Hours 60= Total hours 120

Units	Name of the sub Topic	No of Lectures
Unit – I Introduction to Research Methodology		
1.1	Research: definition, scope and significance	15
1.2	Objectives of Research	
1.3	Types of Research	
1.4	Research Ethics	
Unit- II Research Problem and Research Design		
2.1	Research Problem: definition, identification and necessity	15
2.2	Technique involved in defining a problem	
2.3	Meaning, needs and features of research design	
2.4	Types of research design	
Unit- III Methods of Data Collection		
3.1	Primary Data: Interview Method, Questionnaire Method, Observation Method, Survey Method, Case Study Method, Experimental Method	15
3.2	Secondary Data :Government Sources, Syndicated Sources, Other Types of Sources	
Unit - IV Research Report Writing		
4.1	Types of Research Report: Technical Report, Popular Report	15
4.2	Characteristics of Good Research Report Writing	
4.3	Techniques of Research Report Writing: i) Structure and organization of research reports - Title, abstract, key words, introduction ii) Methodology, results, discussion, conclusion, references, footnotes iii) Concepts of Case Study	
Blue Highlighted Topic / Course has focus on employability/ entrepreneurship/skill development		

References

1. Montello Daniel R. and Sutton Paul C. (2006) – Introduction to scientific research Methods if Geography. By Saga Publication
2. Kothari , C. R. (2004) – Research Methodology -Methods and techniques, New Age.
3. Mishra, H.N. and Sing, V.P. (1998)- research Methodology in Geography, Rawat Publication
4. Clifford, N. Fresh S, Valentine, G. (2010) - Key Methods in Geography, Saga Publication
5. Gregory , K. J. (2000) – The changing Nature of Physical Geography, Arnold, London
6. Gomez basil and Jones, III John Paul (editor) (2010) – Research Methods in geography: A Critical, Wiley – Blackwell
7. Harvey, David (1971) – Explanation in Geography, Edward Arnold , London
8. Chorley, R. J. and P. Hagg-tt(ed) (1967) – Models in Geography, Methuen
9. Gaum, Carl G., Graves, Harod F., and Hoffman, Lyne, S.S., (1950): Report Writing, 3rd ed., New York: Prentice-Hall.
10. Kothari, C.R. (2004): Research Methodology: Methods and Techniques, New Age

Discipline Specific Elective (DSC)
URBAN GEOGRAPHY

Course Outcome:After successfully completion of this course, the students will be able to ...

1. Explain the demographic, economic and social aspects and understand the urbanization trends, urban sprawl, fringes of urban geography.[2]
2. Compare and contrast the concept of Industrialization, political economy of urbanization with their characteristics. [4]
3. Compare and contrast the concept of Industrialization, political economy of urbanization with their characteristics. [4]
4. Determine the elements of city plan and prepare the master plan. [6]

Modules at a Glance

Unit No.	Unit	Unit Wise Weightage of Marks (in %)
1	Urbanization Process and Urban Systems	15
2	Urbanization Process, Capitalism and development	15
3	Contemporary Urban issues & Urban policy and planning	15
4	Understanding the Urban Transformation with Special Reference to Mumbai Metropolitan Region	15

M. A. – I GEOGRAPHY	
URBAN GEOGRAPHY	
SEMESTER: I	COURSE CODE: PGGEO104B, COURSE CREDITS: 6
Teaching Hours 60 + Notional Hours 60 = Total hours 120	

Unit No.	Name of the Sub Topics	No of Lectures
Unit – I Urbanization Process and Urban Systems		
1	The bases of urbanization- Demographic, economic and social aspects- Origins of the cities- Urbanisation Trends – urban fringe, urban sprawl and suburbanization	15
1	Urban Land use – various approaches – Classical, Neo-classical approaches – Human, Ecology, land economics, activity systems	
1	Urban location of economic activities– Urban morphology and land use- Critical Perspective	
1	Urban System- Evolution, growth and organization- Primacy, hierarchy and balance– urban functions and Town classification	
Unit – II Urbanization Process, Capitalism and development		
2.1	Capitalism and urban development - Urbanization in the industrialized world -Political economy of urbanization.	15
2.2	Urbanization in the Third World - Concept of peripheral urbanization - Salient characteristics- slums and Urban poverty- Capitalism and urban development -Urbanization in the industrialized world	
2.3	Colonial and post-colonial structure – Concepts of dualism and urban economic base in Third World Cities	
2.4	Theoretical Perspectives on role of Cities in regional and national development – cumulative Causation- Core and Periphery and growth pole theory - Top-down and bottom-up approach of urban and regional Planning	
Unit – III Contemporary Urban issues & Urban policy and planning		
3.1	Price of land and vertical and horizontal growth of cities, Urban sprawl	15
3.2	Socio-economical and environmental issues of urban region	
3.3	Policies of Urban development	
3.4	Need of city planning, Elements of city plan, Master Plan of towns, New towns	
Unit – IV Understanding the Urban Transformation with Special Reference to Mumbai Metropolitan Region		
4.1	Slum redevelopment in Mumbai- the case of Dharavi	15
4.2	Issues of urban planning and environment in Kalyan-Dombivali Municipal region	
4.3	Mumbai a reclaimed city and challenges in urban planning	15
4.4	The Planned City of Navi Mumbai: A Critical Perspective	
Green Highlighted Topic / Course is related to local/national/regional & global development needs		

REFERENCES:

1. Carter, H (1972): *The Study of Urban Geography*, Edward Arnold.
2. A. Latham, D. McCormack, K. McNamara, D. McNeill (2009): *Key Concepts in Geography*, Sage.
3. Harvey, D.(1973): *Social Justice and the City*, Arnold
4. Abu-Lughod, J. and Hay, R. Jr. (1977): *Third World Urbanisation*, Maarouta Press.
5. Gugler. J. (ed.)(1988): *The Urbanisation of the Third World*, O.U.P 6. Sassen, S. (1991): *The Global City*, Princeton University Press.
6. Clarke, D. (1982): *Urban Geography: An Introductory Guide*, Groom Helm.
7. Marcuse, P. and Kempen, R.V. (eds.),(2000): *Globalizing Cities: A New Spatial Order*, Blackwell,
8. Short, J. R. (1996): *The Urban Order*, Basil Blackwell.
9. Smith, N. (1996): *The New Urban Frontier*, Rutledge
10. King A. D. (1990): *Global Cities*, Rutledge.
11. Simmonds, R. and Hack, G. (2000): *Global City Regions*, Spon Press.
12. Markusen, A.R., et al. (1991): *Second Tier Cities- Rapid Growth beyond the Metropolis*, University of Minnesota Press.
13. Allen J. Scott (ed.), (2001): *Global City Regions, Trends, Theory & Policy*, Oxford University Press.
14. David Harvey (1985): *The Urbanization of Capital*, John Hopkins University Press.

Skill-Enhancement Elective Course (SEC)

Introduction to Geographic Information System and Global Positioning System

Course Objectives:

1. To introduce the students about the basic concepts of GIS.
2. To acquaint the students with the utility and applications of GIS Technique.
3. To create the awareness about Geospatial technology among the students.
4. To inculcate skill of map making among the students by using GIS Technique

Course Outcomes: On successfully completion of this course, the students will able to -

1. Comprehend knowledge about the concepts in GIS.
2. Articulate the various types of GIS data.
3. Devise GPS ground survey and map
4. Acquire skills of map making using GIS.
5. Design the various map and conclude solution.

Modules at a Glance

Unit No.	Unit	Unit Wise Weightage of Marks (in %)
1	Introduction to GIS	15
2	Data Types & Models	15
3	Global Positioning System	15
4	Software based Practical	15

M.A.-I GEOGRAPHY (SEMESTER- I)
INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEM
AND GLOBAL POSITIONING SYSTEM
COURSE CODE: PGGEO105: COURSE CREDIT: 06
 Teaching Hours 60+ Notional Hours 60.= Total hours 120

Units	Name of sub units	No of Lectures
Unit – I Introduction to GIS		
1.1	Definition of GIS	
1.2	Stages of GIS Development	
1.3	Objectives of GIS	
1.4	Components GIS	
1.5	GIS Applications	
Unit-II Data Types & Models		
2.1	Spatial Data – Concept, Sources; Data Models – Raster & Vector	
2.2	Non-spatial Data – Concept, Sources; Data Models – Relational, Network, Hierarchical & Object-orientated	
Unit- III Global Positioning System		
3.1	GPS : Concept, Segments, Applications	
3.2	Types of GPS – GPS Data Accuracy and Errors	
3.3	Factors Affecting GPS Data - Global Navigation System	
3.4	Ground Survey and Demarcation of Point, Line and Polygon Features with GPS Device – Transfer GPS Data to Computer with Software's like Easy GPS	
Unit-IV Software based Practical		
4.1	Geo-referencing of Toposheet/Map	
4.2	Digitization of Point, Line & Polygon (at least one layer of each)	
4.3	Data Attachment	
4.4	Creation of Layout and Map	
Green Highlighted Topic / Course is related to local/national/regional & global development needs		

Reference Books:

- Burrough, P. A. and McDonnell, R. A. (2000): Principles of Geographical Information Systems, Oxford University Press, New York.
- Chang, K. T. (2008): Introduction to Geographic Information Systems, Avenue of the Americas, McGraw-Hill, New York.
- Debashis, C. and Sahoo, R. N. (2015): Fundamentals of Geographic Information System, Viva Books Private Limited.
- DeMers, M. N. (2008): Fundamentals of Geographic Information Systems, John Wiley and Sons, New Delhi.
- Heywood, I., Cornelius, S. and Carver, S. (2011): An Introduction to Geographical Information Systems, Pearson Education, New Delhi.
- Karlekar, S. (2007): Bhaugolik Mahiti Pranali (GIS), Diamond Publications, Pune.
- Korte, G. B. (2001): The GIS Book, Onward Press, Bangalore.
- Longley, P. A., Goodchild, M. F., Maguire, D. J. and Rhind, D. W. (2002): Geographical Information Systems and Science, John Wiley & Sons, Chichester.
- Lo Albert, C. P., Yeung and Albert K. W. (2002): Concepts and Techniques of Geographical Information Systems, Prentice Hall of India, New Delhi.
- Pandey, J. and Pathak D. (2015): Geographic Information System, TERI Press, The Energy and Resources Institute, New Delhi.

Semester – II
Core Course (CC)
ECONOMIC GEOGRAPHY

Course Outcome: After successfully completion of this course, the students will be able to ...

1. Explain the concept of manufacturing, growth and development of industrial geography. [2]
2. Apply the approaches of economic geography. [3]
3. Analyze the world energy condition with examples. [4]
4. Predict the energy crisis of the world with examples. [6]
5. Explain the role of regional trade blocks in the economic development.[2]

Modules at a Glance

Unit No.	Unit	Unit Wise Weightage of Marks (in %)
1	Introduction to Economic Geography	15
2	Growth of Industrial Geography	15
3	Energy Resources	15
4	Transportation and Trade Block	15

M. A.- GEOGRAPHY		
ECONOMIC GEOGRAPHY		
SEMESTER: II	COURSE CODE:PGGEO201,	CREDITS:6
Teaching Hours 60 + Notional Hours 60 = Total hours 120		

Units	Name of the Sub Topic	No of Lectures
Unit – I Introduction to Economic Geography		
1.1	Definition, Nature and scope of economic geography	15
1.2	Fundamentals of economic geography	
1.3	Approaches to the study of economic geography	
1.4	Basis of economic processes: Production, exchange & consumption. Classification of economic activities-	
Unit – II Growth of Industrial Geography		
2.1	Definition & Importance of manufacturing	15
2.2	Concept of growth and development of Industrial geography	
2.3	Principles of Industrial Location – Profit maximization - Least cost location –Substitution –Interdependence – Territorial production complexes	
2.4	Factors of Industrial Location	
2.5	Weber & Losch, Rostows model, Industrial policy in India	
Unit- III Energy Resources		
3.1	Meaning and classification of resources	15
3.2	World energy situation;	
3.3	Sources of Energy: Coal, Oil, Natural gas and Nuclear energy, OPEC Transportation and Trade Blocks	
3.4	Energy crisis.	
Unit – IV Transportation and Trade Block		
4.1	Modes of transportation	15
4.2	Characteristics and relative significance of modes of transportation,	
4.3	Accessibility and connectivity;	
4.4	Interregional and Intraregional: Ullman’s triad- Complementarily- Intervening Opportunity- Transferability.	
4.5	Globalization, Regional Trade blocks EEC, EFTA, & WTO. Ricardo’s Classical Theory.	

Green Highlighted Topic / Course is related to local/national/regional & global development needs

REFERENCES:

1. Hartshorne, T. A. and Alexander, J. W. (2010): Economic Geography, PHI Learning, New Delhi
2. Knox, P., Agnew, J. and McCarthy, L. (2008): The Geography of the World Economy, Hodder Arnold, London
3. Lloyd, P. and Dicken, B. (1972): Location in Space: A Theoretical Approach to Economic Geography, Harper and Row, New York
4. Siddhartha, K. (2000): Economic Geography: Theories, Process and Patterns, Kishalaya Publications, New Delhi
5. Smith, D. M. (1971): Industrial Location: An Economic Geographical Analysis, John Wiley and Sons, New York

Core Course (CC)
Population Geography

Course Outcome:

1. Understand the distribution patterns of population on global and regional scale. [2]
2. Calculate fertility, mortality with the help of data. [6]
3. Illustrate the migration theories predict the migration process. [3][6]
4. Recognize the problems of urbanization and analyze the policies of urbanization. [2][4]
5. Explain the limits of growth, human development and gender equity. [2]

Modules at a Glance

Unit No.	Unit	Unit Wise Weightage of Marks (in %)
1	Introduction to Population Geography	15
2	Measures of Fertility and Mortality	15
3	Population Theories	15
4	Population Resources and Policy	15

M. A.-I GEOGRAPHY

POPULATION GEOGRAPHY

SEMESTER:II COURSE CODE:PGGEO202, CREDITS:6

Teaching Hours 60 + Notional Hours 60 = Total hours 120

Units	Name of the Sub Topic	No of Lectures
Unit – I Introduction to Population Geography		
1.1	Meaning, nature, scope and signify etc with the help of significance of population geography	15
1.2	Sources of population data	
1.3	Factors influencing population distribution and density	
1.4	Population distribution patterns- world and India	
1.5	Population composition-demographic, socio-cultural, economic	
Unit – II Measures of Fertility and Mortality		
2.1	Fertility- measures and methods of estimations & Spatio-temporal variations	15
2.2	Mortality- measures and methods of estimation	
2.3	Migration- measures and methods of estimations	
2.4	Urbanization-issues, perspectives and policies.	
Unit – III Population Theories		
3.1	Theories of population growth: Malthus, Neo-Malthusian, Marx, Demographic Transition Model	15
3.2	Migration theories: Ravenstein and Everette Lee; Epidemiological Transition	
Unit – IV Population Resources and Policy		
4.1	Population as resource, population and development debate, population as ecosystem	15
4.2	Limits to Growth, Population resource region, Human development, gender equity	
4.3	Population Policies-perspectives from developed and developing world	
4.4	National Population Policy of India	
Green Highlighted Topic / Course is related to local/national/regional & global development needs		

REFERENCES:

1. Bhende, A. and Kanitkar, T. (2008): Principles of Population Studies, Himalaya Publishing House, Mumbai
2. Chandana, R. C. and Sidhu, M. S. (1980): Introduction to Population Geography, Kalyani, New Delhi
3. Clarke, J. F. (1965): Population Geography, Pergamon Press, Oxford
4. Garnier, B. (1966): Geography of Population, Longman, London
5. Hussain, M. (1999): Human Geography, Rawat Publication, Jaipur
6. Mandal, R. B. (1979): Introduction to Rural Settlement, Concept Publishing Company, New Delhi
7. Sawant, S. B. (1994): Population Geography, Mehta Publishing House, Pune
8. Shivramkrishanan, K. C. et al (2005): Handbook of Urbanization in India, Oxford, Delhi

Discipline Specific Elective (DSE)

Practical Paper

Tools and Techniques of Spatial Analysis- II

Course Outcome:

1. Generate the locations map of mean, median centre in particular place and analyze the results. [6]
2. Prepare the matrices table with the help of minimum aggregate distance and calculate accessibility and connectivity. [6]
3. Distinguish between Aspatial and spatial data. [4]
4. According to the geographical data, select the appropriate diagram / graph/image/ picture. [5]

Modules at a Glance

Unit No.	Unit	Unit Wise Weightage of Marks (in %)
1	Statistical Techniques	24
2	Nature and application of spatial data	20
3	Computer processing of geographical data	16

M. A. GEOGRAPHY PRACTICAL PAPER

TOOLS AND TECHNIQUES OF SPATIAL ANALYSIS- II

SEMESTER:II COURSE CODE:PGGEO203, CREDITS:6

Teaching Hours 60 + Notional Hours 60 = Total hours 120

Units	Name of the Sub Topic	No of Lectures
Unit – I Statistical Techniques		
1.1 A	Measures of Central Tendency	24
1.1.1	Measures of central tendency: mean center, median center and mode , weighted mean	
1.1.2	Z score – different applications and interpretations.	
1.2 B	Network Analysis	
1.2.1	Topological graphs -Connectivity- Calculations of Alpha, beta and gamma indices.	
1.2.2	Mapping of relative accessibility and connectivity – Matrices- point of minimum aggregate travel distance	
Unit- II Nature and application of spatial data		
2.1	Data types – qualitative and quantitative	20
2.2	Aspatial and spatial data	
2.3	Scales of measurement of data: nominal, ordinal, interval and ratio – symbolization and representation – interpretation and relationships	
2.4	Sources of data – Primary and secondary	
2.5	Designing a questionnaire	
Unit – III Computer processing of geographical data		
3.1	Symbolization, Preparation of matrix	16
3.2	Diagrammatic Representation.	
3.3	Compilation of data	
3.4	Computation of data: qualitative and quantitative data based on descriptive statistical measures application of computer programmes	
Blue Highlighted Topic / Course has focus on employability/ entrepreneurship/skill development		

REFERENCES:

1. Robinson, A. H. and Others (1995): Elements of Cartography, VI Edition, John Wiley & Sons, New York.
2. Anson, R. W. and Ormeling, F. J., (Ed.) (1993): Basic Cartography for Students and Technicians, Vol.I, International Cartographic Association and Elsevier Applied Science Publishers, London.
3. Dickinson, G. C. (1977) Statistical Mapping and the Presentation of Statistics, Edward Arnold Ltd., London.
4. Monkhouse, F. J. and H. R. Wilkinson, (1971): Maps and Diagrams, Methuen & Co. Ltd., London.
5. Hodgkiss, A. G. (1970): Maps for Books and Theses, David and Charles Publishers Ltd., London.
6. Misra R. P. and A. Ramesh, (1969): Fundamentals of Cartography, Prasaranga, University of Mysore
7. Young, P. V. and Schmid, C. F. (1979) : Scientific Social Surveys and Research, ntice Hall, New Delhi.
- 8 .MahmoodAslam (1977), Statistical Methods in Geographical Studies, Rajesh Publication, New Delhi.
9. Hammond,R. and McCullagh,P.S. (1974), Quantitative Techniques in Geography: An Introduction, Oxford University Press, London.
10. Yeates, M (1974), An Introduction to Quantitative Analysis in Human Geography, McGraw Hill Book Co., New York.
11. Cole, J. P. and King, C. A. M., (1968), Quantitative Geography, John Wiley and Sons, London.
12. Fotheringham,A.S., Brunsdon, C., Charlton,M ,(2000) Quantitative Geography: Perspectives on Spatial Data Analysis, Sage Publication Ltd, London,
- 13 .Baily,T.C., and Gatrell, A. C, (1995), Interactive Spatial Data Analysis, Prentice Hall, London
14. Griffith ,D. A. , Layne, L.J.,(2002) A Casebook for Spatial Statistical Data Analysis: A Compilation of Analyses of Different Thematic Data Sets , Amazon.com
15. Wicox, P.R. (2003), Applying Contemporary Statistical Techniques, Academic Press, Amsterdam

Core Course (CC)
Statistical Tools for Data Analysis

Course Outcome:

1. Understand the fundamentals of statistical techniques of correlation and regression analysis. [2]
2. Apply sampling techniques in geographical analysis. [4]
3. Test the hypothesis for research problem. [4]

Modules at a Glance

Unit No.	Unit	Unit Wise Weightage of Marks (in %)
1	Central Tendency, Correlation and Regression	15
2	Index Number	15
3	Sampling	15
4	Hypothesis formulation and Hypothesis Testing	15

M. A. GEOGRAPHY

Statistical Tools for Data Analysis

SEMESTER:II COURSE CODE:PGGEO 204A, COURSE CREDITS:6

Teaching Hours 60 + Notional Hours 60 = Total hours 120

Units	Name of the Sub Topics	No of Lectures
Unit – I Central Tendency, Correlation and Regression		
1.1	Central Tendency: Mean, Mode and Medium	15
1.2	Correlation-Meaning and types of correlation, measurement of correlation, Scatter diagram, Karl Pearson's coefficient of correlation, Spearman's Rank correlation- Testing of correlation coefficient.	
1.3	Regression: Simple regression model-estimation & least squares model- Goodness of fit. Introduction to multiple regressions.	
Unit- II Index Number		
2.1	Meaning & classification and problems encountered while constructing index numbers- uses and limitation of index numbers, Methods of constructing index numbers: Simple indices) aggregate method ii) simple average of relatives method, Weighted index: Laspeyres, Paache's and Fisher's index and weighted average of relatives method. Limitations of Index Number.	15
2.2	Concepts of Base shifting, splicing, and deflating, Consumer price index: meaning, need and construction & methods: aggregate expenditure method and family budget method.	
Unit – III Sampling		
3.1	Meaning and Aims of Sampling	15
3.2	Characteristics of good Sample	
3.3	Sampling Techniques or Methods	
3.4	Probability Sampling Methods	
3.5	Non-Probability Sampling Methods	
3.6	Optimum size of sampling and Advantages and Limitations of Sampling	
Unit – IV Hypothesis formulation and Hypothesis Testing		
4.1	Definition and functions of hypothesis and Criteria of workable hypothesis & forms and sources of hypothesis- Concepts in Testing of Hypothesis: Universe / Population, parameter and statistic.	15
4.2	Null and Alternative Hypotheses, Levels of Significance, critical region, Type I and Type II errors.	
4.3	T-test, F-test, X ² -test	
Blue Highlighted Topic / Course has focus on employability/ entrepreneurship/skill development		

References:

1. C. R. Kothari and Gaurav Garg, Research Methodology Methods and Techniques, New Age Publicshers, Third Edition 2014.
2. Goode J. William &Hatt K. Paul, Methods in social Research, New York, McGraw-Hill, 1952.
3. Krishnaswami, O.R &, M. Ranganathan , Methodology of Research in Social Sciences, Himalaya Publishing House, Mumbai, 2011.
4. Kumar, Renjith (2009) Research Methodology: A Step by Step Guide for Research, Delhi, Pearson Education, 2009.
5. P.Saravanel Research Methodology, KitabMahal, Allahabad, 1987. 6) Gupta S P Statistical Methods Sultan Chand and Sons.

M.A. PART-I GEOGRAPHY CBCS SYLLABUS 2021-22
Discipline Specific Elective (DSE)

SOCIAL- CULTURAL GEOGRAPHY

Course Outcome:

1. Discuss the basic elements of society and culture in geography.[2]
2. Assess the process social; change through modernization, sanskritization and globalization.[5]
3. Illustrate the theories of distribution of race and classify the racial groups along with physical characteristics.[3]
4. Compare and contrast social development and well-being. [4]
5. Identify the levels and indicators for measuring social well-being.[2]

Modules at a Glance

Unit No.	Unit	Unit Wise Weightage of Marks (in %)
1	Introduction to Social and Cultural Geography	15
2	Socio-Cultural diversity of India	15
3	Introduction to Culture and Race	15
4	Social Development and Well being	15

M. A. GEOGRAPHY

SOCIAL- CULTURAL GEOGRAPHY

SEMESTER:II COURSE CODE:PGGEO 204B, COURSE CREDITS:6

Teaching Hours 60 + Notional Hours 60 = Total hours 120

Units	Name of the Sub Topics	No of Lectures
Unit – I Introduction to Social and Cultural Geography		
1.1	Definition, scope, and significance of Social and Cultural Geography	15
1.2	Society and culture as essential elements in geographical studies.	
Unit- II Socio-Cultural diversity of India		
2.1	Concept of Dialects and ethnicity	15
2.2	Distribution of Religion, Caste, Tribe, Language in India.	
2.3	Concept of social areas, North-South	
2.4	Socio-Cultural diversity of India and Kinship pattern	
2.5	Processes of Social changes: Modernization, Sanskritization and Globalization	
Unit – III Introduction to Culture and Race		
3.1	Concept of culture, culture areas and culture regions, Cultural hearths and cultural diffusion,	15
3.2	World Culture Realms. Concept of race	
3.3	Griffith Taylor and C. S. Coon’s Theories of distribution of races of mankind in the world	
3.4	Basis of racial classification and their physical characteristics	
3.5	Races of India	
Unit – IV Social Development and Well being		
4.1	Concept of social Justice and fair society, Equality and welfare	15
4.2	Social development and well-being.	
4.3	Indicators for measurement	
4.4	Levels of well-being in India,	
4.5	Spatial patterns of status of women in India	
Yellow Highlighted Topic / Course is related to professional ethics, gender, human values, Environment & sustainability		

REFERENCES:

1. Peet, R. (1998), *Modern Geographical Thought*, Blackwell
2. Peet, R. and Thrift, N. (eds.) (2002), *New Models in Geography*, UnwinHymann.
3. Barnes Trevor and Gregory Derek, (eds.) (1997): *Reading Human Geography- The Poetic and Politics of Inquiry*, Arnold, London.
4. Daniels Stephen and Lee Roger, (eds.) (1996): *Exploring Human Geography- A Reader*, Arnold, London.
5. Cloke, P. and Johnston, R., (eds.), (2005), *Spaces of Geographical Thought, Deconstructing Human Geography's Binaries*, Sage.
6. Aitken, S and Valentine, G. (2006), *Approaches to Human geography*, Sage.
7. Johnston, R.J., Gregory D. Pratt G. and Watts M., (2005, 5th ed.), *the Dictionary of Human Geography*, Blackwell.
8. Kitchin R., Thrift, N, (eds.) (2009), *The International Encyclopedia of Human Geography*, Elsevier.
9. Dear J. Michael and Flusty Steven, (eds.) (2002): *The Spaces of Post Modernity*, Blackwell, Massachusetts.
10. Benko Georges and Strohmayer Ulf, (eds.) (2004): *Human Geography- A History for the 21st Century*, Arnold, London.
11. Atkinson, D., Jackson, P., Sibley, D. and Washbourne, N. (eds.) (2005), *Cultural Geography, A Critical Geography of Key Concepts*, Tauris, I.B.
12. Cloke, P., Crang, P., Goodwin, M.,(2004), *Envisioning Human Geographies*, Arnold.
13. Cloke Paul, Crang Philip and Goodwin Mark, (eds.) (1999): *Introducing Human Geographies*, Arnold, London.
14. Banerjee-Guha, S. (2004), *Space, Society and Geography*, Rawat, New Delhi.

Skill-Enhancement Elective Course (SEC)

APPLIED COURSE OF TRAVEL & TOURISM

Course Objectives:

1. To develop basic framework to understand the various elements of tourism management.
2. To evaluate the role of transport in travel and tourism industry.
3. To develop the skills to arrange, manage and implement various types of tours.

Course Outcome:

1. Students will be able to perform online as well as offline booking and cancellation procedures for different available modes of travel and tourism.
2. Students will be able to acquire earning skills in tourism industry.

Modules at a Glance

Unit No.	Unit	Unit Wise Weightage of Marks (in %)
1	Introduction to Social and Cultural Geography	15
2	Socio-Cultural diversity of India	15
3	Introduction to Culture and Race	15
4	Social Development and Well being	15

M.A.- I GEOGRAPHY (SEMESTER- II)**APPLIED COURSE OF TRAVEL & TOURISM****COURSE CODE: PGGEO205; COURSE CREDIT: 06**

Teaching Hours 60 + Notional Hours 60 = Total hours 120

Units	Name of the sub Topics	No of Lectures
Unit- I Introduction to Travel and Tourism		
1.1	Basic concepts: Travel, Tourism, Tourist, Transport	15
1.2	Types of Tourist and Tourism	
1.3	Types of transportation	
1.4	Supporting Infrastructure: Transportation, Accommodation, Communication facility, Security, Finance, Tourist Guide and Government Policy (Only short introduction)	
Unit- II Local Tourism		
2.1	Concept and need of local tourism	15
2.2	Introduction to local tourist places	
2.3	Potential of local tourism and available infrastructure	
Unit- III Tour planning and Skill development		
3.1	Basic skills: Communication, Time Management, Computer operating, online booking, Net banking, Cancellation of booking and ticket, etc.	15
3.2	Framing the tour plan (Itinerary): Budget (Costing), Duration, Insurance, Route and other requirements for individual, family, group and mass level tours	
3.3	Promotion of tourism	
3.4	Plan for educational tour (long or short): Permission for tour, ticket booking, students concession and ticket cancellation, etc.	
Unit- IV Project work and Visit to tourist place		
4.1	Itinerary design of short or long tour (local, state level and national level: Cost, duration, requirements, booking processes for transportation (Railway, Air and Road) and Accommodations (Youth hostel, Resort, Dormitory, Hotels, Service Apartments, etc.) and Insurance.	15
4.2	International Tour Pre-planning: Need and types of passport and visa, documents required for passport and visa, other necessary documents required for International tours, International Date Line, Time difference, GMT and Indian Standard Time with help of internet sources.	
4.3	One short tour (Not more than two days duration) and Preparation of tour report.	
Blue Highlighted Topic / Course has focus on employability/ entrepreneurship/skill development		

Text Books:

1. Bhatia. Tourism Development (New Delhi, Sterling)
2. Seth: Tourism Management (New Delhi, Sterling)
3. Kaul: Dynamics of Tourism (New Delhi, Sterling)
4. Mill and Morrison – The Tourism system an Introductory Text (1992) Prentice Hall
5. Cooper, Fletcher, Tourism, Principles and practices (1993) Pitman
6. Burkart and Medlik Tourism, Past, Present and Future (1981) Heinemann, ELBS.
7. P.S. Gill, Dynamics of Tourism (4 Vols) Anmol Publication.
8. P.C. Sinha, Tourism Management. Anmol Publication.

References:

1. Travel Industry : Chunky Gee et-al
2. Tourism Systems - Mill and Morrison
3. Tourism Management Vol - 4 - P.C. Sinha
4. Tourism Development - R. Gartner
5. Studies in Tourism - Sagar Singh
6. Tourism: Principles and Practices - Cooper C., Fletcher J., Gilbert D and Wanhil.
7. Tourism: Principles and Practices - McIntosh , R.W.
8. Tourism : Past, Present and Future - Burkart &Medli

M. A. GEOGRAPHY PART- I
SEMESTER- I AND II
(With effect from the academic year 2021-22)

EVALUATION PATTERN OF THEORY PAPERS

INTERNAL ASSESSMENT- 40 MARKS

Practical Examination will be conducted separately

Evaluation type	Marks
Internal Evaluation	40
a) Online Examination	20
b) Class Room Presentation	10
c) Field Visit and report writing d) Project Report e) Attendance Seminar, Conference and workshop f) Paper Presentation in Seminar &Conference g) Making Models (As per the syllabus) h) Free Online Courses	10

EXTERNAL ASSESSMENT- 60 MARKS

- Duration – 2 Hours for eachpaper.
- There shall be eight questions each of 15 marks on eachunit.
- All questions shall be compulsory with internal choice within thequestions.

Questions	Sub. Question	Unit	Marks
1	a) OR b)	Based on Unit - I	15
2	a) OR b)	Based on Unit – II	15
3	a) OR b)	Based on Unit – III	15
4	a) OR b)	Based on Unit – IV	15

M. A. GEOGRAPHY PART- I
SEMESTER-I AND II
(With effect from the academic year 2021-22)
EVALUATION PATTERN OF PRACTICAL PAPERS

INTERNAL ASSESSMENT- 40 MARKS

Practical Examination will be conducted separately

Evaluation type	Marks
Internal Evaluation	40
a) Class Test	20
b) Problem Solving /Viva	10
c) Field Visit and reportwriting d) ProjectReport e) Attendance Seminar, Conference andworkshop f) Paper Presentation in Seminar &Conference g) Making Models (As per thesyllabus) h) Free OnlineCourses i) Assignments	10

EXTERNAL ASSESSMENT- 60 MARKS

- Duration – 3 Hours for eachpaper.
- Each unit carries 15 marks.
- All questions shall be compulsory with internal choice within thequestions.
- **External Examiner/s will be appointed from otheruniversity.**

Questions	Unit	Marks
1	Based on Unit - I	15
2	Based on Unit – II	15
3	Based on Unit – III	15
4	Journal + Viva	15