Annexure: 2-C

# PARISHKAR COLLEGE OF GLOBAL EXCELLENCE (AUTONOMOUS) JAIPUR



# SCHEME OF EXAMINATION, COURSE STRUCTURE & SYLLABUS AS PER UGC



# CHOICE BASED CREDIT SYSTEM (CBCS) FOR

# MASTER OF ARTS / MASTER OF SCIENCE GEOGRAPHY

# PARISHKAR COLLEGE OF GLOBAL EXCELLENCE (AUTONOMOUS)

# **Syllabus**

# **SEMESTER I**

The student will study three core courses, which are compulsory; and select one elective course.

Core Courses (All the three courses are compulsory)

Course	Course Name
Code	
	History of Geographical Thought
	Geomorphology
	Economic Geography
	Practical

Elective Courses (Select any one course)

Course	Course Name
Code	
	Quantitative Techniques in Geography
	Industrial Geography
	Environment and Ecology

# **SEMESTER II**

The student will study three core courses, which are compulsory; and select one elective course.

Core Courses (All the three courses are compulsory)

Course	Course Name
Code	
	Urban Geography
	Climatology
	Geography of India
	Practical

# Elective Courses (Select any one course)

Course	Course Name
Code	
	Cultural Geography
	Regional Planning & Development
	Water Resource and Their
	Management

# **SEMESTER III**

The student will study two core courses, which are compulsory; and select three elective courses.

Core Courses (All the two courses are compulsory)

Course	Course Name
Code	
	Population Geography
	Political Geography
	Practical (Remote Sensing & GIS)

Elective Courses (Select any three courses)

Course	Course Name
Code	
	Rural Development in India
	Socio- Cultural Geography
	Geography of Tourism
	Oceanography
	Settelement Geography

# **SEMESTER IV**

The student will study two core courses, which are compulsory; and select three elective course.

Core Courses (All the two courses are compulsory)

Course	Course Name
Code	
	Research Methodology
	Agricultural Geography
	Practical

Elective Courses (Select any three courses)

Course	Course Name
Code	
	Transport Geography
	Bio- Geography
	Advanced Cartography
	Disaster Mangement
	Dissertation

#### **Semester I- Core Course**

# **History of Geographical Thought**

# **Course Objectives:**

- 1. This course aims to provide knowledge of disciplinary development of Geography.
- 2. It aims to enable students to contextualize the conceptual traditions within geography along with the major philosophical influences.
- 3. It promotes an understanding of the fluidity, expansion and inclusivity of Modern Geographical Thought

# **Learning Outcomes:**

On successful completion of the Course the student will be able to-

- 1. Recognize the elements of Geography and trace the evolution of the subject.
- 2. Discover and develop understanding about the contributions of various schools of Geographical Thought.
- 3. Identify and focus on the various geographical concept and dichotomy in the subject

#### **Section-A**

- Definition, Scope, Nature, and purpose of Geography.
- The beginning of Geography in Classical Age.
- Development of Geographical knowledge during Ancient and Medieval period.
- Contributions of Greek, Roman and Arab Geographers.

#### **Section-B**

- Foundations of Modern Geography.
- Contributions of German, French, British and American Schools.
- Development of geographical knowledge in India.
- Conceptual and methodological developments during the 20<sup>th</sup> century with changing paradigms.

#### Section-C

- Dualism in Geography.
- Determinism, Possibilism and Neo determinism.
- Quantitative revolution and impact of Positivism.
- Behaviouralism, Humanism, Radicalism and Welfare approach in Geography.
- Areal differentiation.

# **Essential Readings:**

- Prof. Husain Majid: Evolution of Geographical Thought Rawat Publications, Jawahar Nagar, Jaipur
- Kathuria, C. D.: History of Geographical Thought: Centrum Press
- Prof. Husain Majid: Human Geography: Rawat Publications,
   Jawahar Nagar, Jaipur
- Peet, Richard : Modern Geographical Thought : Rawat Publications,
- Jawahar Nagar, Jaipur
- जैन, शेषमल : भौगोलिक चिन्तन एवं विधि तंत्र : साहित्य भवन, आगरा
- सिंह, जगदीश : भौगोलिक चिन्तन का क्रम विकास : ज्ञानोदय प्रकाशन, गोरखपुर
- कौशिक, एस.डी. : भौगोलिक चिन्तन एवं विधि तंत्र : साहित्य भवन, आगरा
- दीक्षित, रमेश चन्द : भौगोलिक चिन्तन का विकास एवं ऐतिहासिक समीक्षा,
   प्रिन्टीस हॉल इण्डिया।

# **Semester I- Core Course**

# Geomorphology

# **Course Objectives:**

- 1. An understanding of the linkages between landscape form and processes.
- 2. Familiarity and experience applying fundamental concepts in physical systems.
- 3. Practice in using models, data and logical reasoning to critically evaluate and connect information about geomorphic processes.

# **Learning Outcomes**

On successful completion of the Course the student will be able to-

- 1. Identify and discuss the fundamental concepts, incidences and occurrences of seismology and vulcanicity, plate tectonics and isostasy.
- 2. Summarize and evaluate Continental and mountain building theories.
- 3. Illustrate various landforms and classify their process of evolution and distribution.
- 4. Build competency and academic excellence for competition exams.

#### Section-A

- Introduction to Geomorphology, Definition, Recent Trends in Geomorphology.
- Interior Structure of the Earth, Thermal state of the Earth's interior.
- Origin of Continents and Oceans, Continental Drift Theory of Wegner and Plate Tectonic Theory.
- Mountain Building Theories, (Kobber, Jeffreys, Joly, Holmes).
- Concept of Isostasy- Airy, Pratt, Arther Holmes.
- Earthquakes and Volcanoes.

#### **Section-B**

- Earth Movements- Endogenetic forces and Exogenetic forces.
- Process of Denudation
- Weathering- Types (Physical, Chemical and Biological Weathering), factors affecting weathering processes.
- Concept of Erosion Normal Cycle of Erosion.
- Erosion cycle of Davis and Penck.

#### Section-C

- Drainage System and Patterns.
- Element of slope.
- Models of Slope Development (W. M. Davis, W. Penck, L. C. King).
- Topographies (Formation and Characteristics): Fluvial, Glacial, Aeoline (Arid & Semi Arid), Karst, Coastal.

# **Essential Readings:**

- Singh, S.: Geomorphology, Prayag Pustak Bhawan, Allahabad,
   2010
- Dayal, P.: Geomorphology, Rajesh Publication, New Delhi
- Sharma, H.S. (ed.): Perspective in Geomorphology Concept Publications, New Delhi, 1980
- Woldridge and Morgan: An Introduction to Geomorphology, Longmens, Green and Com. London
- सिंह, सविन्द्र : भू, आकृति विज्ञान, प्रयाग पुस्तक भवन, इलाहाबाद
- गुप्ता, एस.एल.: भू, आकृति विज्ञान, हिन्दी माध्यम कार्यान्वय निदेशालय दिल्ली विश्वविद्यालय

# **Semester I- Core Course**

# **Economic Geography**

# **Course Objectives:**

- 1. The students will appreciate the significance of social, cultural and political factors as central to the functioning of economies; and that the economic processes needs to be analysed in social, cultural and political contexts.
- 2. The students will be exposed to contemporary themes in economic geography and be conscious of the numerous economic issues confronting the world economic system.
- 3. The students will realise the relevance of economic geography for analysing contemporary societies and economies.

# **Learning Outcomes**

On successful completion of the Course the student will be able to-

- 1. Classify economies and discover factors affecting location of economic activities.
- 2. Exemplify the economic theories and establish a connection with the industrial development of the world.
- 3. Observe various modes of transportation and access the impact of globalization on trade.
- 4. Build competency and academic excellence for competition exams.
- 5. Hone & developemployability related skills for holistic development.

#### Section-A

- Changing Nature and Scope of Economic Geography as a field of study.
- Agricultural Typology-with special reference to Subsistence Agriculture, Plantation Agriculture, Mediterranean Agriculture, Mixed Farming, Commercial Grain Farming, Livestock Rearing.

#### **Section-B**

Energy Resources: Conventional and Non-converntional, Spatial patterns and Supply problems, Industries-Iron & Steel, Aluminum Industry, Paper and Pulp, Cotton Textile, Chemical Industries-Fertilizer and Auto moblie.

#### **Section-C**

- Decision making process: Location decision-behavioural view.
- Dynamics of World Trade and Investment: Trend and growth of international co-operation in trade.
- Economic Region-Concept and methods of delineation, need of economic regionalization for area development and planning.
- Economic Regions of India.
- Globalization and its impact on the spread of Covid.

#### **Essential Readings:**

- Hartshorn & Alexander: Economic Geography, Prentice Hall of India, New Delhi
- Alexandra J.W.: Economic Geography, Mc Graw Hill, New Delhi
- Hodder & Lee: Economic Geography, St. Martins Press, New York
- Robson, H: Economic Geography, Mac. Donald, London
- सिंह, जगदीश एवं सिंह काशीनाथ : आर्थिक भूगोल के मूल तत्व ज्ञानोदय प्रकाशन, गोरखपुर
- कौशिक, एस.डी. : मानव तथा आर्थिक भूगोल, रस्तोगी प्रकाशन, मेरठ

#### **Semester I- Core Course**

# **Practical Geography**

- Profile: introduction, Method of Drawing a Profile, Kinds of Profiles (Serial, Superimosed, Proected, Composite)
- Representation of Relief Feature : Methods of Representing the Relief
- Slope analysis
- Statistics: Collection of Data (Primary & Secondary), Statistical Series, Kinds of Frequency Distribution, Mean, Mode Median, Range, Mean Deviation, Standard Deviation, Correlation

# **Reading List**

- Mishra, R.N. and Shrama, P.K. 2020: Prayogik Bhugol, Rawat Publication, Jaipur
- Sharma, J P (2020) Prayogtmak Bhugol Ki Rooprekha, Rastogi Publications, Meerut.
- Kannan Monika and Yadav, S. (2022): Practical Geography, Rawat Publication, Jaipur
- Anson R. and Ormelling F.J., 1994. International Cartographic Association: Basic Cartographic Vol. Pregmen Press.
- Gupta K.K. and Tyagi, V.C., 1992: Working with Map, Survey of India, DST, New Delhi.
- Mishra R.P. and Ramesh, A., 1989: Fundamentals of Cartography, Concept, New Delhi.
- Monkhouse F.J. and Wilkison H.R., 1973: Maps and Diagrams, Methuen, London.
- Rhind D. W. and Taylor D.R. F., (eds.), 1989: Cartography: Past, Present and Future, Elsevier, International Cartographic Association.
- Robinson A.H., 2009: Elements of Cartography, John Wiley and Sons, New York.
- Singh R.L. and Singh R.P.B., 1999: Elements of Practical Geography, Kalyani Publishers.
- Sarkar, A. (2015) Practical Geography: A systematic approach. Orient Black Swan Private Ltd., New Delhi.
- Singh R L & Rana P B Singh (2019) Prayogtmak Bhugol Ke Mool Tatva, Kalyani Publishers, New Delhi.

# **Semester II- Elective Course**

Quantitative Techniques in Geography

# **Course Objectives:**

- 1. This course studies the concept of statistics and its geographical applications.
- 2. It lays the foundation of quantitative techniques to the students for spatial analysis.
- 3. It will enhance the ability to interpret data statistically.

# **Learning Outcomes:**

On successful completion of the Course the student will be able to

- 1. Understand and estimate the importance of quantitative techniques.
- 2. Differentiate between parametric and non- parametric inferences.
- 3. Formulate hypothesis and measure the level of significance.
- 4. Build competency and academic excellence for competition exams.

#### **Section - A**

- Statistics: Meaning and Objective.
- Sampling techniques.
- Central Tendencies: Mean, Median, Mode.
- Measures of Dispersion: Range, Quartile deviation,
- Standard deviation.

#### **Section - B**

- Types of Statistics: Parametric & Non- Parametric, Descriptive and Inferential Statistics.
- Scales of measurement: Nominal, Ordinal, Interval Ratio.
- Correlation: Meaning and Types (Spearman and Karl Pearson).
- Regression Analysis.

#### **Section -C**

- Hypothesis testing, Level of significance.
- Chi-square test: Meaning & Computation.
- t-test; z-test; Analysis of Variance (ANOVA).

### **Reference Books:**

- David Unwin.(1981). Introductory Spatial Analysis. London: Methuen.
- Gregory, S. Statistical Methods and the Geographer. London: Longman.
- Hammond R and P.S. (1974). McCullagh Quantitative Techniques in Geography: An Introduction, Clarendan Press, Oxford.
- John P.Cole and Cuchlaine A. M. King. (1968).Quantitative Geography.London: John Wiley.
- Nagar, K.N. (2018). Fundamentals of Statistics. Meerut: Meenakshi Prakashan.
- Peter Haggett, Andrew D. Cliff, & Allan Frey. (1977). Location Methods Vol. I and II. London: Edward Arnold.

# **Semester II- Elective Course**

# **Industrial Geography**

# **Course Objectives:**

- 1. The students will be exposed to basic concepts of Development of Industry.
- 2. The students will be conscious of pioneering thinkers in Industry Development.
- 3. The students will be aware of the background theory of regional planning and its processes of Industry.

# **Learning Outcomes:**

On successful completion of the Course the student will be able to

- 1. Identify the elements and factors of localization of industries.
- 2. Establish a connection between the localization theories and distribution of manufacturing industries in the world.
- 3. Speculate the impact of globalization and changing industrial policies on world environment.

#### **Section - A**

- Nature, Scope and Recent Developments.
- Elements and Factors of Localization.
- Centralization and Decentralization.
- Theories and Models of Industrial Location: (Weber, Losch, Isard and Hoover).

#### **Section - B**

- Distribution and spatial pattern of manufacturing industries:
- Iron and Steel, Textiles, Chemicals.
- Major Manufacturing Regions of USA, Japan, China and India.

#### **Section - C**

- Environmental Degradation caused by Industries.
- Impact of Industries on Economic Development.
- Role of Globalization on industrial sector.
- Concept of Industrial Decentralization.

#### **Reference Books:**

- Alexander, J.W (1988). Economic Geography. Englewood Cliffs: Prentice Hall.
- Alexanderson, C (1967). Geography of Manufacturing. Bombay: Prentice Hall. SGCA/M.A.Geography/2021-22 21
- Hoover, E.M. (1948). The Location and Space Economy. New York: McGraw Hill.
- Isard, W. (1956). Methods of Regional Analysis. New York: The Technology Press of M.I.T. & John Wiley & Sons.
- Miller, E. (1962). A Geography of Manufacturing. New Jersey: Prentice Hall. Englewood Cliffs.

# **Semester II- Elective Course**

# **Environment And Ecology**

# **Course Objective:**

- 1. In depth study of Climatology and Biogeography.
- 2. Knowledge of interrelationship between man and nature.
- 3. Detail discussion of floral and faunal provinces and its various dimensions.

# **Course Learning Outcome:**

- 1. Dynamics of climate and related theories.
- 2. Understanding of Vegetation as an index of climate.
- 3. Assessment of different aspects of floral and faunal provinces.

#### Section-A

- Components of Environment and Ecology.
- Human Ecology
- Physical factors influencing World distribution of Plants and Animals.
- Types, forms and functions of Ecosystem Forest, Grassland, Marine, Desert and Mountain Ecosystems.
- Energy flow

#### **Section-B**

- Bio-diversity; depletion and conservation.
- Environmental pollution types, causes, effects and solutions.
- Climate change- Global Warming and Ozone Depletion.
- Food Chain, Food Web and Ecological Pyramid.

#### **Section-C**

- Environmental hazards and disasters; types, effects and management and Environmental Impact Assessment (EIA).
- National Programmes and Policies.
- International Treaties and Programmes.
- (Brundtland Commission, Kyoto protocal, Agenda 21, Sustainable Development Goal, Paris Agreement)

### **Reference Books:**

- Saxena, K.K.: Environmental Studies, University Book House, Jaipur
- Duffey, E.: Conservation of Nature Collins, London Singh, R.B.
   Thakur, D.K. Chauhan, J.P.S.: Environmental Studies, RBD Jaipur
- Edington, J.M.: Ecology Environmental Planning, Champan and Hall, London
- नेगी, पी.एस. : पारिस्थितिकीय विकास एवं पर्यावरण भूगोल, रस्तोगी प्रकाशन,मेरठ
- सक्सेना, एच.एम. : पर्यावरण एवं पारिस्थितिकी भूगोल, राजस्थान हिन्दी ग्रंथ अकादमी, जयपुर
- सिंह, सिवन्द्र: पर्यावरण भूगोल, प्रयाग पुस्तक भवन, इलाहाबाद सिंह, सिवन्द्र: जैव भूगोल, प्रयाग पुस्तक भवन, इलाहाबाद

#### **Semester I- Core Course**

# **Urban Geography**

# **Course Objectives:**

- 1. To critically understand the complexities of urban cities and the experience of living in these cities.
- 2. To critically understand a broad range of issues that cities face today.
- 3. To provide a basic social, cultural, political and economic understanding of cities.

# **Learning Outcomes:**

# On successful completion of the Course the student will be able to-

- 1. Understand the nature, scope, and evolution of urban geography as a subject.
- 2. Discover and summarize various theories of development of urban systems.
- 3. Elaborate the functional classification of cities and interpret sustainable urban planning and development.

#### Section-A

- Meaning, Nature, Aims and scope of Urban Geography.
- Urban Centres, Characteristics of town, Cities,
- Types of Cities Metropolis and Megapolis.
- Urban Morphology: Morphology of Indian cities.

#### Section-B

- Urban Rank-Size relationship.
- The Basic and Non-Basic Concept of Urban economic functions and its urban hierarchy based on functions.
- Chief characteristics of CBD and Periferi Region.
- Theories and Models of urban structure Christaller and Losch.

#### Section-C

- Centrifugal and Centripetal forces in Urban Geography.
- Development of Suburbs, Rural, Urban Fringe, Satellite Towns, Ring Towns, Sphere of Urban Influence (Umland) and its delimitation.
- Urban Problems (developing, developed and under develop countries), Problems of environmetal, Urban poverty, slums, transportations, Housing, crimes.
- Study of master plan of Jaipur city
- Concept of Smart city.

#### **Reference Books:**

- Taylor G.: Urban Geography, Muthyen and Co., London.
- Dickinson, R.E.: City, Region and Regionalism, Routleged and Kegon Paul, London.
- A.E. Smailes: The Geography of Towns, Hutchinson, University
- Library, London.
- बंसल, सुरेशचन्द : नगरीय भूगोल, मीनाक्षी प्रकाशन, मेरठ।
- मौर्य, एस.डी. : नगरीय भूगाल, शारदा पुस्तक भवन, इलाहबाद।
- जोशी, रतन : नगरीय भूगोल, राजस्थान हिन्दी ग्रन्थ अकादमी, जयपुर।

# **Semester II- Core Course**

# **Climatology**

# **Course Objective:**

- 1. In depth study of Climatology
- 2. Knowledge of interrelationship between man and nature.
- 3. Detail discussion of floral and faunal provinces and its various dimensions.

# **Course Learning Outcome:**

- 1. Dynamics of climate and related theories.
- 2. Understanding of Vegetation as an index of climate.
- 3. Assessment of different aspects of floral and faunal provinces.

# **Learning Outcomes:**

On successful completion of the Course the student will be able to-

- 1. Distinguish the various climatic phenomenon and explain their global to regional distribution.
- 2. Classify climatic regions of the world and observe dynamics of cyclones.
- 3. Sketch the major features of ocean basins and critically evaluate the distribution of temperature and salinity in oceans
- 4. Build competency and academic excellence for competition exams

#### **Section-A**

- Composition and structure of Atmosphere,
- Insolation
- Heat Budget,
- Distribution of Temperature,

#### Section-B

- Atmospheric Pressure and Pressure Belts.
- Global Wind System Plantery, Seasional and Local.
- Air-masses and Fronts
- Temperate and Tropical Cyclones

#### Section-C

- Types and distribution of Clouds and Precipitation
- Classification of World Climates according to Koppen's and Thornthwatte's schemes.
- Recent concerns Climate Change and its impact.

# **Essential Readings**

- Crtchifield J.H.: General Climatology Prentic Hall India, New Delhi
- Lal, D.S.: Climatology & Oceanography, Sharda Pustak Bhawan, Allahabad
- Siddharth, K.: Atmosphere, Weather & Climate, Kitab Mahal, New Delhi
- Siddharth, K.: Oceanography: A Brief Introduction, Kitab Mahal, New Delhi
- सिंह, सविन्द्र : जलवायु विज्ञान, प्रयाग पुस्तक भवन, इलाहाबाद
- बंसल, एस.सी. : जलवायु एवं समुद्र विज्ञान, वसुन्धरा प्रकाशन, गोरखपुर
- लाल, डी. एस. : जलवायु एवं समुद्र विज्ञान, केदारनाथ-रामनाथ, मेरठ
- गौत्तम, अल्का : जलवायु एवं समुद्र विज्ञान, रस्तोगी प्रकाशन, मेरठ

# **Semester II- Core Course**

# **Geography of India**

# **Course Objectives:**

- 1. This course on the Geography of India assumes' that the students are familiar with the basic landforms, climate, soil, vegetation and population characteristics of India.
- 2. It is a course designed to enable students to broaden and deepen their understanding of India.

# **Learning Outcomes:**

On successful completion of the Course the student will be able to-

- 1. Outline and interpret the different physiographical features of India.
- 2. Categorize and elaborate the mineral and power potential of India.
- 3. Estimate the impact of industrial development and assess the regional disparity levels in the country.
- 4. Build competency and academic excellence for competition exams.

# Section-A

- Physiographic divisions,
- Climate and Monsoon
- Vegetation
- Drainage
- Types and Distributions of Soils.
- Major Multiperpose River Projects Bhakhara-Nangal, Damodar Valley Project, Heerakund.

#### Section-B

- Agriculture; major food and commercial crops
- Green revolution and food security
- Minerals Iron ore, Copper, Zinc and Lead.
- Power Resources Coal, Petroleum, Atomic Energy.
- Major industries Iron and Steel, Textile, Cement, Aluminium, and Fertilizer.
- Industrial Regions of India.

#### Section-C

- Population distribution and growth.
- Population problems and policies.
- Regional disparities in social and economic development
- Regional planning in India and Planning Regions.
- Development of Road, Rail and Inland Water Ways
- Economic Region of India

# **Essential Readings:**

- Tritha, R: Geography of India, Rawat Publication, New Delhi
- Gautam, Alka: Advanced Geography of India, Sharda Publication, Allahabad
- Singh, R.L.: India-A Regional Geography, UBS Publication & Distributors Ltd, New Delhi
- Singh Jagdish: India-A, Comprehensive Systematic Geography, Gayonodaya Prakasan, Gorkhpur,
- सिंह, गोपाल : भारत का भूगोल, आत्माराम एण्ड सन्स, नई दिल्ली
- तिवाड़ी, आर.सी. : भारत का भूगोल, वसुन्धरा प्रकाशन, गोरखपुर
- बंसल, सुरेश चन्द्र : भारत का वृहद् भूगोल, मिनाक्षी प्रकाशन, मेरठ
- हुसैन, माजिद : भारत का भूगोल, टाटा मैग्राहिल्स पब्लिशिंग कम्पनी लि. नई दिल्ली
- मामोरिया, चतुर्भुज : आधुनिक भारत का वृहद् भूगोल, प्रतिय

# **Semester II - Core Course**

# **Practical Geography**

- Projection: Definition of Map-Projection, Scale of Projection, Classification of Projection, Conical, Cylindrical, Zenithal, Conventional (Mathematical)
- Weather map and symbol: Introduction, Indian Meteorological Observatiories, Instruments of Wind Observation, Rain Measuring Instruments, Indian Daily Weather Report
- Diagram: Introduction, Kinds of Diagrams,
- One-dimensional (Line & Bar),
- Two-dimensional (Pie, Square, Rectangular),
- Three-dimensional (Sphere, Cube)
- Social and Economic Survey

# **Reading List**

- Mishra, R.N. and Shrama, P.K. 2020: Prayogik Bhugol, Rawat Publication, Jaipur
- Sharma, J P (2020) Prayogtmak Bhugol Ki Rooprekha, Rastogi Publications, Meerut.
- Kannan Monika and Yadav, S. (2022): Practical Geography, Rawat Publication, Jaipur
- Anson R. and Ormelling F.J., 1994. International Cartographic Association: Basic Cartographic Vol. Pregmen Press.
- Gupta K.K. and Tyagi, V.C., 1992: Working with Map, Survey of India, DST, New Delhi.
- Mishra R.P. and Ramesh, A., 1989: Fundamentals of Cartography, Concept, New Delhi.
- Monkhouse F.J. and Wilkison H.R., 1973: Maps and Diagrams, Methuen, London.
- Rhind D. W. and Taylor D.R. F., (eds.), 1989: Cartography: Past, Present and Future, Elsevier, International Cartographic Association.
- Robinson A.H., 2009: Elements of Cartography, John Wiley and Sons, New York.
- Singh R.L. and Singh R.P.B., 1999: Elements of Practical Geography, Kalyani Publishers.
- Sarkar, A. (2015) Practical Geography: A systematic approach. Orient Black Swan Private Ltd., New Delhi.
- Singh R L & Rana P B Singh (2019) Prayogtmak Bhugol Ke Mool Tatva, Kalyani Publishers, New Delhi.

# **Semester I- Elective Course**

# **Cultural Geography**

# **Course Objectives:**

- 1. To enhance the understanding of culture using key concepts of geography
- 2. To develop analytical skills to decode culture
- 3. To provide a critical understanding of the contemporary issues and the politics underlying it

# **Learning Outcomes**

On successful completion of the Course the student will be able to-

- 1. Understand the role of elements of culture in the formation of cultural regions.
- 2. Discuss the importance of cultural regions and cultural ecology in economic development.
- 3. Summarize economic activities and cultural adaptations in developing countries.

#### **Section-A**

- Definition, Nature and Scope of Cultural Geography
- Cultural Diversity in World.
- Distribultion and Characteristics of Primary Race of the World,
   Zone and Stata Theory.
- Cultural Diversity and Regionalization in India.

#### **Section-B**

- Theories of Tribal Groups, Environment impact on dwelling places as cultural expressions and Problems arising due to Cultural Diffusion, Racism and Terrorism.
- Geography of Ethnic Groups and Tribal Groups.
- Civilization: Mesopotamian, Nile, Indus and Hwang ho Village with respect to Racial. Ethnic, Religious.
- Major Cultural Hearths, Realms and Regions of the World.

#### **Section-C**

- Cultural Ecology
- Cutural Convergence, Politics of Difference: Cast, Class, Race, Gender Sexuality.
- Major Linguistic Families and their distribution in the World, Base of Culture Diversity: Race, Religion, Language and Nationalism.
- Patterns of Livelihood: Various Economic Activities & Cultural Adaptation, Agriculture, Industrialization and Modernization.

#### **Readings Recommednded:**

- Anderson, J. 2009: Understanding Cultural Geography-Places and traces. Routledge, USA Anderson, K. Domosh, M., Pile, S. and Trift, N. (eds.) 2003: Handbook of Cultural Geography. Sage Publications, London.
- Ahmad, Aijazuddin 1999: Social Geography. Rawat Publication, New Delhi.
- Chapman, K. 1979: People, Pattern and Process-An Inteduction to Human Geography. Edward Arnold Ltd. Delhi.
- Mitchell, D. 2000: Cultural Geography. Environments, Identities, Inequalities, Oxford University Press, Toronto, 2<sup>nd</sup> edition.
- रिजवी, मुनीरूदीन 2001 : सांस्कृतिक भूगोल। राजस्थान हिन्दी ग्रन्थ अकादमी, जयपुर

# **Semester II- Elective Course**

# **Regional Planning**

# **Course Objectives:**

- 1. The students will be exposed to basic concepts of urban and regional planning.
- 2. The students will be conscious of pioneering thinkers in urban planning.
- 3. The students will be aware of the background theory of regional planning and its processes.

# **Learning Outcomes:**

On successful completion of the Course the student will be able to-

- 1. Explain and interpret the concept of regional planning.
- 2. Discuss the models and theories of regional planning and their relevance in present times.
- 3. Assess the short- and long-term impact of planning in the process of regional development.
- 4. Build competency and academic excellence for competition exams.

#### **Section-A**

- Regional Planning: Conceptual and Theoretical Framework of Regional Planning. Principles and Determination of Regional Planning
- Multi-level Planning, Types of Regions
- Concept of Special Purpose Regions

#### **Section-B**

- Significance of the term 'Integration' (Political, Economic, social and spatial) for regional planning.
- Importance of the political system for regional planning.
- Significance of the factor, adaptation of developments of different social classes of the population for regional planning
- Type of regions and methods of Regionalization.
- Growth Pole and Growth Centers.

#### **Section-C**

- Methods of Regional Planning
- Types of Planning.
- Concept of Multi- level planning
- Case study from selected Countries (India, Japan and Germany)

# **Essential Readings:**

- Chandra, R.C.: Regional Planning and Development, Kalyani Publications, Ludhiyana.
- श्रीवास्तव, वी.कं. एवं वर्मो नन्देश्वर : प्रादेशिक नियोजन एवं सन्तुलित विकास, वसुन्धरा प्रकाशन, गोरखपुर।
- मिश्र, निरंजन : क्षेत्रीय नियोजन, राजस्थान हिन्दी ग्रन्थ अकादमी, जयपुर।

# **Semester II- Elective Course**

# Water Resource and their Management

# **Course Objective:**

- 1. Awareness about resource availability, accessibility, utilization, its use and misuse
- 2. Spatial distribution of natural resources
- 3. Resource management and governance

# **Course Learning Outcome:**

- 1. At the end the course student should learn importance of natural resources
- 2. Conservation methods and awareness about community participation
- 3. Assessment of role of national and international efforts to mitigate resource problems.

#### **Section-A**

- Definition and Scope of Water Resources Geography, Distribution of Water Resource (World and India)
- Hydrological Cycle
- Demand and Use of Water in Agriculture

#### **Section-B**

- Water Quality and Land Use
- Salinity, Water Pollution, Demand and Supply of Water in Industries.
- Flood and Drought

#### **Section-C**

- Water Conservation, Traditional Methood of Water Conservation in India and Rajasthan
- Watershed Management
- River Water Dispute (Indus, Brahmputra and Ganga)
- Water Management by Remote Sensing Technology

# **Essential Readings:**

- Matter, J.R.: Water Resources and Distributors, Use and Management, John Wiley, Marylane.
- Rao K.L.: India's Water Wealth, Orient Longman, New Delhi.
- Jones, J.A.: Global Hydrology: Process Resources and Environmental Management, Orient Longman, New Delhi.
- Athavale R.N.: Water harvesting and Sustainable Supply in India, Rawat Publication, Jaipur.
- गुर्जर रामकुमार एवं जाट बी.सी. : जल संसाधान भूगोल, रावत पब्लिकेशन्स, जयपुर
- उपाध्याय डी.पी. एवं रामाश्रय : जलवायु एवं जल विज्ञान, वसुन्धरा प्रकाशन, गोरखपुर।