

# **UNDERGRADUATE PROGRAMME**

## **SYLLABUS FOR UNDERGRADUATE (NEP) PROGRAMME IN GEOGRAPHY**

**w.e.f. SESSION 2024-2025**



**DEPARTMENT OF GEOGRAPHY  
UNIVERSITY OF LUCKNOW  
LUCKNOW**

## STRUCTURE U.G. GEOGRAPHY UNDER NEP

Year	SEM	Major A (Subject 1)		Major B (Subject 2)		Minor (Subject 3)	CC/VC		Total Credits	Degree		
		Courses	Credits	Course	Credits		Credits	Course			Credits	
1	Sem-1	P-1 Physical Geography	4	P-1	4	Q-1 Physical Geography	2	CC1 FUNDAMENTALS OF GEOGRAPHY	2	20	Certificate	
		P-2 Human Geography	4	P-2	4							
	Sem-2	P-3 Economic Geography	4	P-3	4	Q-2 Economic Geography	2	VC1 Fundamental of Remote Sensing & GIS	2			20
		P-4 Cartographic Techniques (Practical)	4	P-4	4							
2	Sem-3	P-5 Geography of India	4	P-5	4	Q-3 Geography of India	2	CC2 ENVIRONMENTAL & SUSTAINABLE DEVELOPMENT	2	20	Diploma	
		P-6 Remote Sensing and GIS	4	P-6	4							
	Sem-4	P-7 Regional Planning and Development	4	P-7	4	Q-4 Regional Planning and Development	2	VC2 DISASTER MANAGEMENT	2			20
		P-8 Statistical Methods and Map Analysis (Practical)	4	P-8	4							
3	Sem-5	P-9 Geography of Tourism	4	P-9	4	Internship /Term Paper / Minor Project in Major A (to be decided by students in Semester-5)	4		20	Graduation Degree		
		P-10 Environmental Geography	4	P-10	4							
	Sem-6	P-11 Evolution of Geographical Thoughts	4	P-11	4							
		P-12 Surveying, Survey and Field Trip, Report Writing (Practical)	4	P-12	4							
		P-13 A Agriculture Geography	4									
		P-13 B Disaster Management										
P-13 C Social Geography												
4	Sem-7	P-14 Geomorphology	4			Major Research Project or Dissertation	12	20	Graduation Honors with Research			
		P-15 Climatology	4									
		P-16 Settlement Geography	4									
		P-17 Political Geography	4									
		P-18 A Industrial Geography	4									
		P-18 B Urban Geography										
	P-18 C Cultural Geography											
	SEM-8	P-19 (Research Methodology)	4									
P-20 (Term Paper)		4										
<b>Rashtra Gaurav (Compulsory Non Credited)**</b>												
<b>Total Credited</b>									<b>160</b>			

Note :

\* Students will study courses P-13 to P-20 in the subject that they choose to continue in year 4.

\*\* All students will have to pass the Rashtra Gaurav for obtaining certificate, diploma, undergraduate degree or undergraduate honours degree with research, only once.

CC: Co-curricular Course, VC: Vocational Course

## **B. A. (GEOGRAPHY) 1<sup>ST</sup> YEAR, SEM-1**

<b>PAPER / TITLE</b>	<b>P-1 / PHYSICAL GEOGRAPHY</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	CORE	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	• <b>ASSIGNMENT</b> : 10	
		• <b>PRESENTATION</b> : 10	
		• <b>ATTENDANCE</b> : 05	

### **COURSE OBJECTIVES:**

After Completion of the Course Students will be able:-

1. To understand the physical geography.
2. To understand the dynamics of earth and related activity.
3. To understand Earth's atmosphere and its impact on humans.
4. To understand the importance of water as a resource.

### **COURSE LEARNING OUTCOMES:**

On completion of this course, learners will be able to:-

1. The Earth geomorphic transition from beginning to present day.
2. Plate tectonics and related movements.
3. Landforms carved by various agents of erosion.
4. Earth's climate and that factors that influence it.
5. Oceans system and biogeography of the world.

### **COURSE CONTENT:-**

#### **UNIT-I**

Nature and Scope of Physical Geography, Origin of the Earth: Theories of Kant, Laplace, Chamberlin and James Jeans, Geological Time Scale, Interior of the Earth, Origin of Continents and Oceans, Continental Drift theory- Taylor and Wegener, Concept of Plate Tectonics, Earthquakes and Volcanoes.

#### **UNIT-II**

Rocks, Folding, Faulting, Weathering, Erosion, Cycle of Erosion by Davis and Penck, Drainage Pattern, Fluvial, Karst, Aeolian, Glacial, and Coastal Landforms.

#### **UNIT-III**

Composition and Structure of atmosphere, Insolation, Temperature, Atmospheric pressure and winds, Air Masses and Fronts, Cyclones and Anti-cyclones, Humidity, Precipitation and Rainfall types.

#### **UNIT-IV**

Ocean Bottoms, Temperature of the Ocean water and Salinity, Currents and Tides, Ocean deposits, Corals and Atolls, Biosphere, Biome, Zoo-geographical regions of the world.

### **SUGGESTED READINGS:**

1. Singh, Savindra (2018), Physical Geography (Eng./Hindi) Allahabad, India: Prayag Pustak.
2. Huggett, R.J. (2007): Fundamentals of Geomorphology. New York, U.S.A.: Routledge.
3. Khullar, D.R. (2012). Physical Geography. New Delhi. India: Kalyani Publishers.
4. Strahler, A. H. and Strahler, A N. (2001): Modern Physical Geography (4/E). New York, U.S.A.: John Wiley and Sons, Inc.
5. Thornbury, W. D. (2004): Principal of Geomorphology. New York, U.S.A.: Wiley.
6. Bloom, A. L. (2003). Geomorphology: A Systematic Analysis of Late Cenozoic Landforms, New Delhi, India: Prentice-Hall of India.

## **B. A. (GEOGRAPHY) 1<sup>ST</sup> YEAR, SEM-1**

<b>PAPER / TITLE</b>	<b>P-2 / HUMAN GEOGRAPHY</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	CORE	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	• <b>ASSIGNMENT : 10</b>	
		• <b>PRESENTATION : 10</b>	
		• <b>ATTENDANCE : 05</b>	

### **COURSE OBJECTIVES:**

After Completion of the Course Students will be able:-

1. To understand the Concept, Nature, Meaning and Scope of Human Geography.
2. To understand the natural and Cultural Changes in and around the Human Environs and their interrelationship.

### **COURSE LEARNING OUTCOMES:**

On completion of this course, learners will be able to:-

1. To understand the Concept, Nature, Meaning and Scope of Human Geography.
2. To understand the natural and Cultural Changes in and around the Human Environs and their interrelationship.

### **COURSE CONTENT:-**

#### **UNIT-I**

Concept, Nature, Meaning and Scope of Human Geography, Man and Environment relationship-Determinism, Possibilism, and Neo-determinism.

#### **UNIT-II**

Distribution of population and world pattern, global migration - causes and consequences, concept of over population and under population, Human Settlements: Origin, types (Rural-Urban) and characteristics, Settlement Pattern and their distribution with special reference to India.

#### **UNIT-III**

Primitive Economics-Food gathering, Hunting, Pastoral herding, Fishing, Lumbering and Primitive agriculture, Cultural Regions, Cultural Diffusion, Race, Religion and Language.

#### **UNIT-IV**

Primitive People: Eskimos, Kirghiz, Bushman, Masai, Semang, Pygmies, Indian Tribes: Bhotias, Gaddis, Tharus, Bhil, Gond, Santhal, Nagas.

### **SUGGESTED READINGS:**

1. Chisholm, M. (1985): Human Geography, 2nd edition, Penguin Books, London.
2. Singh, B N (2019) Manav Bhugol ka Swaroop, Pravalika Publication, Allahabad.
3. Hussain, M. (1994): Human Geography, Rawat Publications, Jaipur.
4. Singh, B N (2021) Manav evam Arthik Bhugol, Pravalika Publication, Allahabad.
5. Kaushik, S.D. and Sharma, A.K. (1996): Principles of Human Geography (in Hindi), Rastogi Publication, Meerut.
6. Norton, W. (2008): Human Geography, Oxford University Press, New York. 5th ed.
7. Singh, K. N. and Singh, J. (2001): Manav Bhugol. Gyanodaya Prakashan, Gorakhpur. 2nd edition.
8. Singh, L.R. (2005): Fundamentals of Human Geography, Sharda Pustak Bhawan, Allahabad
9. Stoddard, R.H., Wishart, D.J. and Blouet, B.W. (1986): Human Geography. Prentice-Hall, Englewood Cliffs, New Jersey.

## **B. A. (GEOGRAPHY) 1<sup>ST</sup> YEAR, SEM-1 (MINOR)**

<b>PAPER / TITLE</b>	<b>Q-1 / PHYSICAL GEOGRAPHY</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	02	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	<b>MINOR</b>	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	• <b>ASSIGNMENT</b> : 10	
		• <b>PRESENTATION</b> : 10	
		• <b>ATTENDANCE</b> : 05	

### **COURSE OBJECTIVES:**

After Completion of the Course Students will be able to:-

1. To understand the physical geography.
2. To understand the dynamics of earth and related activity.
3. To understand Earth's atmosphere and its impact on humans.
4. To understand the importance of water as a resource.

### **COURSE LEARNING OUTCOMES:**

On completion of this course, learners will be able to:-

1. The Earth geomorphic transition from beginning to present day.
2. Plate tectonics and related movements.
3. Landforms carved by various agents of erosion.
4. Earth's climate and that factors that influence it.
5. Oceans system and biogeography of the world.

### **COURSE CONTENT:-**

#### **UNIT-I**

Nature and Scope of Physical Geography, Origin of the Earth: Theories of Kant, Laplace, Chamberlin and James Jeans, Geological Time Scale, Interior of the Earth, Origin of Continents and Oceans, Continental Drift theory- Taylor and Wegener, Concept of Plate Tectonics, Earthquakes and Volcanoes.

#### **UNIT-II**

Composition and Structure of atmosphere, Insolation, Temperature, Atmospheric pressure and winds, Cyclones and Anti-cyclones, Humidity, Precipitation and Rainfall types. Ocean Bottoms, Temperature of the Ocean water and Salinity, Currents and Tides, Biosphere.

### **SUGGESTED READINGS:**

1. Singh, Savindra (2018), Physical Geography (Eng./Hindi) Allahabad, India: Prayag Pustak.
2. Huggett, R.J. (2007): Fundamentals of Geomorphology. New York, U.S.A.: Routledge.
3. Khullar, D.R. (2012). Physical Geography. New Delhi. India: Kalyani Publishers.
4. Strahler, A. H. and Strahler, A N. (2001): Modern Physical Geography (4/E). New York, U.S.A.: John Wiley and Sons, Inc.
5. Thornbury, W. D. (2004): Principal of Geomorphology. New York, U.S.A.: Wiley.
6. Bloom, A. L. (2003). Geomorphology: A Systematic Analysis of Late Cenozoic Landforms, New Delhi, India: Prentice-Hall of India.

## B. A. (GEOGRAPHY) 1<sup>ST</sup> YEAR, SEM-2

<b>PAPER / TITLE</b>	<b>P-3 / ECONOMIC GEOGRAPHY</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	CORE	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	• <b>ASSIGNMENT</b> : 10	
		• <b>PRESENTATION</b> : 10	
		• <b>ATTENDANCE</b> : 05	

### COURSE OBJECTIVES:

After Completion of the Course Students will be able:-

1. To understand the Meaning, concepts and approaches of Economic Geography.
2. To Understand the nature of Economic activities, Resource Distribution.
3. To Understand the Effect of globalization on developing countries.

### COURSE LEARNING OUTCOMES:

On completion of this course, learners will be able to:-

1. Define Meaning, concepts and approaches of Economic Geography.
2. Understand the nature of Economic activities, Resource Distribution.
3. Understand the Effect of globalization on developing countries.

### COURSE CONTENT:-

#### UNIT-I

Meaning, concepts and approaches of Economic Geography, Resource: meaning, concept, classification and Conservation, Spatial organization of economic activities.

#### UNIT-II

Economic organization of space, Forestry, fishing and mining activities, Agricultural typologies, Agricultural land use model (J.H. Von Thunen), agricultural region of the world (Derwent Whittlesey). World distribution and Production of Major Crops; Wheat, Rice, Cotton, Sugarcane and Tea.

#### UNIT-III

Types of industries; Factors of location of industries; iron and steel industry, cotton textiles and sugar; Theory of industrial location (Alfred Weber), World transportation: Sea routes and major trans-continental railways. World Distribution and Production of Major Minerals; Iron Ore, Bauxite and energy, Coal, Petroleum, Hydro and Renewal energy.

#### UNIT-IV

WTO and International trade: Patterns and trends, with special Reference to India, Effect of globalization on developing countries, With Special Reference of India.

### SUGGESTED READINGS:

1. Singh, B N (2021) Manav evam Arthik Bhugol, Pravalika Publication, Allahabad.
2. Gautam, A. (2006): Aarthik Bhugol Ke Mool Tattava, Sharda Pustak Bhawan, Allahabad.
3. Guha, J. S. and Chattoraj, P.R. (2002): A New Approach to Economic Geography: A Study of Resources. The World Press Private Limited, Kolkata.
4. Hanink, D. M. (1997): Principles and Applications of Economic Geography: Economy, Policy, Environment. John Wiley and Sons, Inc, New York.
5. Alexander, J. W. (1988): Economic Geography. Prentice-Hall, New Delhi.

## B.A. (GEOGRAPHY) 1<sup>ST</sup> YEAR, SEM – 2

<b>PAPER / TITLE</b>	<b>P-4 / CARTOGRAPHIC TECHNIQUES (Practical)</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Written Exam</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	CORE	<b>Record File</b>	<b>10</b>
<b>THEORY / PRACTICAL</b>	PRACTICAL	<b>Viva-Voce</b>	<b>10</b>
		<b>Attendance</b>	<b>05</b>

### COURSE OBJECTIVES:

After Completion of the Course Students will be able:-

1. To understand the basics of geography as a discipline.
2. To understand our solar system.
3. To understand man nature relationship.

### COURSE LEARNING OUTCOMES:

On completion of this course, learners will be able to:-

1. Read and prepare maps.
2. Comprehend locational and spatial aspects of the earth surface.
3. Use and importance of maps for regional development and decision making.

### COURSE CONTENT:

#### UNIT-I

Cartography, Nature and Scope, Scale, Concept and application, Graphical Construction of Simple Comparative, Diagonal Scale and vernier Scale.

#### UNIT-II

Representation of relief features; Methods of relief representation, representation of relief features by contours & Profiles.

#### UNIT-III

Map Projection, Criteria for Choice of Projection, Attributes and Properties of Conical Projection with Two Standard Parallel, Bonne's Projection, Cylindrical Equal Area, Mercator's Projection, Zenithal Gnomonic Polar Case, Zenithal Stereographic Polar Case,

#### UNIT-IV

Conventional signs, Topographical Maps; Methods of Studying a Topographical sheet, interpretation of Topographical Maps.

### SUGGESTED READINGS:

1. Anson, R., and Ormelling F. J., (1994): International Cartographic Association: Basic Cartographic, Vol. Pregmen Press.
2. Singh, Gopal, (1998): Map Work and Practical Geography (4th Edition), Vikas Publishing House, Ahmedabad.
3. Gupta, K.K. and Tyagi V.C.,(1992): Working with Map, Survey of India, DST, New Delhi.
4. Misra, R.P.,(2014): Fundamentals of Cartography (Second Revised and Enlarged Edition), Concept Publishing, New Delhi.
5. Monkhouse, F. J. and Wilkinson, H. R.,(1973): Maps and Diagrams, Methuen, London.
6. Robinson, A. H.,(2009): Elements of Cartography (6<sup>th</sup> Edition), John Wiley and Sons, New York.
7. Sarkar, A.,(2015):Practical geography: A systematic approach, Orient Black Swan Private Ltd., New Delhi
8. Sharma, J. P., (2010): PrayogicBhugol(Hindi), Rastogi Publishers, Meerut.
9. Singh, R.L. and Singh R.P.B.,(1999): Elements of Practical Geography, Kalyani Publishers, New Delhi.
10. Singh, R.L. &Dutta, P.K., (2012): Prayogatmak Bhugol(Hindi), Central Book Depot, Allahabad
11. Steers, J.A. (1970) : An Introduction to the Study of Map Projections, University of London Press, London.

## B. A. (GEOGRAPHY) 1<sup>ST</sup> YEAR, SEM-2 (MINOR)

<b>PAPER / TITLE</b>	<b>Q-2 / ECONOMIC GEOGRAPHY</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	02	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	MINOR	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	• <b>ASSIGNMENT</b> : 10	
		• <b>PRESENTATION</b> : 10	
		• <b>ATTENDANCE</b> : 05	

### COURSE OBJECTIVES:

After Completion of the Course Students will be able:-

1. To understand the Meaning, concepts and approaches of Economic Geography.
2. To understand the nature of Economic activities, Resource Distribution.
3. To Understand the Effect of globalization on developing countries.

### COURSE LEARNING OUTCOMES:

On completion of this course, learners will be able to:-

1. Define Meaning, concepts and approaches of Economic Geography.
2. Understand the nature of Economic activities, Resource Distribution.
3. Understand the Effect of globalization on developing countries.

### COURSE CONTENT:-

#### UNIT-I

Meaning, concepts and approaches of Economic Geography, Resource: meaning, concept, classification and Conservation, Spatial organization of economic activities.

#### UNIT-II

World distribution and Production of Major Crops; Wheat, Rice, Cotton, Sugarcane and Tea. World Distribution and Production of Major Minerals; Iron Ore, Bauxite and energy, Coal, Petroleum, Hydro and Renewal energy. Effect of globalization on developing countries, With Special Reference of India.

### SUGGESTED READINGS:

1. Singh, B N (2021) Manav evam Arthik Bhugol, Pravalika Publication, Allahabad.
2. Gautam, A. (2006): Aarthik Bhugol Ke Mool Tattava, Sharda Pustak Bhawan, Allahabad.
3. Guha, J. S. and Chattoraj, P.R. (2002): A New Approach to Economic Geography: A Study of Resources. The World Press Private Limited, Kolkata.
4. Hanink, D. M. (1997): Principles and Applications of Economic Geography: Economy, Policy, Environment. John Wiley and Sons, Inc, New York.
5. Alexander, J. W. (1988): Economic Geography. Prentice-Hall, New Delhi.

## B. A. (GEOGRAPHY) 2<sup>ND</sup> YEAR, SEM-3

<b>PAPER / TITLE</b>	<b>P-5 / GEOGRAPHY OF INDIA</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	CORE	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	• <b>ASSIGNMENT</b> : 10	
		• <b>PRESENTATION</b> : 10	
		• <b>ATTENDANCE</b> : 05	

### COURSE OBJECTIVES:

After Completion of the Course Students will be able:-

1. To understand of 'new' geography of their country.
2. To understand the spatial variations of dimensions of vitality and vulnerability would help them see the strength and weakness of the country.
3. To understand resource location and its judicious use.

### COURSE LEARNING OUTCOMES:

On completion of this course, learners will be able to:-

1. Understand the importance of "Ek Bharat Shrestha Bharat".
2. Students become aware of the physical and cultural aspects of India.
3. Understand the wider aspects of Geography of India.

### COURSE CONTENT:-

#### UNIT-I

Structure and relief; Drainage system, Physiographic regions, Mechanism of Indian monsoons and rainfall patterns, Climatic regions: Koppen's & Thornthwaite's, Natural vegetation, Soil types and their distributions.

#### UNIT-II

Resources: water, energy & mineral, Energy Crisis,

Industry: Evolution of industries, Locational factors of industries, Industrial houses and complexes including public sector undertakings, Industrial regionalization, New industrial policies, Special Economic Zones.

#### UNIT-III

Population: Growth, distribution, and density of population; Demographic attributes: sex-ratio, age structure, literacy rate, work-force, dependency ratio, longevity; migration (inter-regional, intraregional and international) and associated problems; Population problems and policies; Health indicators. Tribal regions and major tribes and associated problems.

#### UNIT-IV

Agriculture: Infrastructure: irrigation, seeds, fertilizers, power; Institutional factors: landholdings, land tenure, and land reforms; Cropping pattern, agricultural productivity, agricultural intensity, crop combination, land capability; Agro and social-forestry; Green revolution and its socio-economic and ecological implications.

### SUGGESTED READINGS:

1. Chauhan, P.R. and Prasad, M. (2003): Bharat Ka Vrihad Bhugol, Vasundhara Prakashan, Gorakhpur.
2. Farmer, B.H. (1983): An Introduction to South Asia. Methuen, London
3. Gautam, A. (2006): Advanced Geography of India, Sharda Pustak Bhawan, Allahabad
4. Krishnan, M.S. (1982): Geology of India and Burma, CAS Publishers and Distributors, Delhi.
5. Bansal SC,(2018) Bharat Ka Bhugol, Meenakshi Publication, New Delhi, Meerut.
6. Nag, P. and Gupta, S. S. (1992): Geography of India, Concept Publishing Company, New Delhi.
7. Rao, B.P. ( 2007): Bharat kee Bhaugolik Sameeksha, Vasundhara Prakashan, Gorakhpur.
8. Singh , J. (2003): India: A Comprehensive Systematic Geography. Gyanodaya Prakashan, Gorakhpur
9. Singh, J. (2001): Bharat: Bhougolik Aadhar Avam Ayam, Gyanodaya Prakashan, Gorakhpur.(Hindi)
10. Singh, R.L. (ed.) (1971): India: A Regional Geography. National Geographical Society of India, Varanasi.
11. Tiwari, R.C. (2007): Geography of India, Prayag Pustak Bhawan, Allahabad.
12. Wadia, D. N. (1959): Geology of India. Mac-Millan and Company, London and student edition, Madras.
13. Khullar, D.R. ( 2007): India: A Comprehensive Geography, Kalyani Publishers, New Delhi.

## B. A. (GEOGRAPHY) 2<sup>ND</sup> YEAR, SEM-3

<b>PAPER / TITLE</b>	<b>P-6 / REMOTE SENSING AND GIS</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	CORE	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	• <b>ASSIGNMENT</b> : 10	
		• <b>PRESENTATION</b> : 10	
		• <b>ATTENDANCE</b> : 05	

### **COURSE OBJECTIVES:-**

After Completion of the Course Students will be able:-

1. Understand the Basic idea and application of Remote sensing Techniques and Geographical Information System.
2. Overall understanding of potential of Remote Sensing, GIS and GPS.
3. Understanding of image interpretation.
4. Understanding of GIS analysis workflow and integrated applications in various domains of Geography.

### **COURSE LEARNING OUTCOMES:-**

On completion of this course, learners will be able to:-

1. Students will be able to understand the concept and function of Remote sensing.
2. Students will be able to understand the application and importance of Remote Sensing and GIS in the field of geographic data analysis and presentation.

### **COURSE CONTENT:-**

#### **UNIT-I**

Remote Sensing: Definition, Types, Scope and Historical Development, Types of Satellites, Electro-Magnetic Radiation: Characteristics, Spectral Regional and Bands. Stages or Process of Remote Sensing.

#### **UNIT-II**

Remote Sensing Satellites: Platforms and Sensors, Resolution: Spatial, Spectral, Temporal, Radiometric Resolution, Remote Sensing Data Processing and Applications: Visual and Digital Image Processing Techniques.

#### **UNIT-III**

Introduction to GIS, Definition, Concepts and Development of GIS Computer Fundamentals for GIS, GIS Packages like ARC GIS, ERDAS, QGIS etc., Coordinate System, Datum, Raster and Vector Data.

#### **UNIT-IV**

Remote Sensing and GIS Applications in Urban Planning Agriculture, Forestry, Land Use / Land Cover Mapping. Oceanic Studies and Disaster Management.

### **SUGGESTED READINGS:**

1. Curran, P.J. (1985): Principles of Remote Sensing, Longman, London.
2. Chaunial, D. D. (2004): Remote Sensing and Geographical Information System(in Hindi), Sharda Pustak Bhawan, Allahabad.
3. Cracknell, A. and Ladson, H. (1990): Remote Sensing Year Book. Taylor and Francis, London.
4. Curran, P.J. (1985): Principles of Remote Sensing. Longman, London.
5. Deekshatulu, B.L. and Rajan, Y.S. (ed.) (1984): Remote Sensing. Indian Academy of Science, Bangalore.
6. Gautam, N.C. and Raghavswamy, V. (2004). Land Use/ Land Cover and Management Practices in India. B.S. Publication., Hyderabad.
7. Jensen, J.R. (2004): Remote Sensing of the Environment: An Earth Resource Perspective. Prentice Hall, Englewood Cliffs, New Jersey. Indian reprint available.
8. Lillesand, T.M. and Kiefer, R.W. (2000): Remote Sensing and Image Interpretation. John Wiley and Sons, New York.
9. Nag, P. (ed.) (1992): Thematic Cartography and Remote Sensing. Concept Publishing Company, New Delhi.
10. Rampal, K.K. (1999): Handbook of Aerial Photography and Interpretation. Concept Publishing. Company, New Delhi.
11. Campell, J. B. (2003): Introduction to Remote Sensing. 4th edition. Taylor and Francis, London.

## B. A. (GEOGRAPHY) 2<sup>ND</sup> YEAR, SEM-3 (MINOR)

<b>PAPER / TITLE</b>	<b>Q-3 / GEOGRAPHY OF INDIA</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	02	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	MINOR	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	<ul style="list-style-type: none"><li>• <b>ASSIGNMENT</b> : 10</li><li>• <b>PRESENTATION</b> : 10</li><li>• <b>ATTENDANCE</b> : 05</li></ul>	

### COURSE OBJECTIVES:

After Completion of the Course Students will be able:-

1. To understand of 'new' geography of their country.
2. To understand the spatial variations of dimensions of vitality and vulnerability would help them see the strength and weakness of the country.
3. To understand resource location and its judicious use.

### COURSE LEARNING OUTCOMES:

On completion of this course, learners will be able to:-

1. Understand the importance of "Ek Bharat Shrestha Bharat".
2. Students become aware of the physical and cultural aspects of India.
3. Understand the wider aspects of Geography of India.

### COURSE CONTENT:-

#### UNIT-I

Structure and relief; Drainage system, Physiographic regions, Mechanism of Indian monsoons and rainfall patterns. Resources: water, energy & mineral, Energy Crisis, Industry: Evolution of industries, Locational factors of industries, Industrial houses and complexes including public sector undertakings, Industrial regionalization, New industrial policies, Special Economic Zones.

#### UNIT-II

Population: Growth, distribution and density of population; Population problems and policies. Cropping pattern, agricultural productivity, agricultural intensity, crop combination, land capability; Agro and social-forestry; Green revolution and its socio-economic and ecological implications.

### SUGGESTED READINGS:

1. Chauhan, P.R. and Prasad, M. (2003): Bharat Ka Vrihad Bhugol, Vasundhara Prakashan, Gorakhpur.
2. Farmer, B.H. (1983): An Introduction to South Asia. Methuen, London
3. Gautam, A. (2006): Advanced Geography of India, Sharda Pustak Bhawan, Allahabad
4. Krishnan, M.S. (1982): Geology of India and Burma, CAS Publishers and Distributors, Delhi.
5. Bansal SC,(2018) Bharat Ka Bhugol, Meenakshi Publication, New Delhi, Meerut.
6. Nag, P. and Gupta, S. S. (1992): Geography of India, Concept Publishing Company, New Delhi.
7. Rao, B.P. ( 2007): Bharat kee Bhaugolik Sameeksha, Vasundhara Prakashan, Gorakhpur.
8. Singh , J. (2003): India: A Comprehensive Systematic Geography. Gyanodaya Prakashan, Gorakhpur
9. Singh, J. (2001): Bharat: Bhougolik Aadhar Avam Ayam, Gyanodaya Prakashan, Gorakhpur.(Hindi)
10. Singh, R.L. (ed.) (1971): India: A Regional Geography. National Geographical Society of India, Varanasi.
11. Tiwari, R.C. (2007): Geography of India, Prayag Pustak Bhawan, Allahabad.
12. Wadia, D. N. (1959): Geology of India. Mac-Millan and Company, London and student edition, Madras.
13. Khullar, D.R. ( 2007): India: A Comprehensive Geography, Kalyani Publishers, New Delhi.

## B. A. (GEOGRAPHY) 2<sup>ND</sup> YEAR, SEM-4

<b>PAPER / TITLE</b>	<b>P-7 / REGIONAL PLANNING &amp; DEVELOPMENT</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	CORE	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	<ul style="list-style-type: none"><li>• <b>ASSIGNMENT</b> : 10</li><li>• <b>PRESENTATION</b> : 10</li><li>• <b>ATTENDANCE</b> : 05</li></ul>	

### **COURSE OBJECTIVES:-**

After Completion of the Course Students will be able:-

1. The students will be able to understand and analyse the principal issues confronting the regions today.
2. The students will get an insight into 'how regions work', through case-study from India.
3. The students will be able to understand and analyse the principal issues confronting the different regions of India.

### **COURSE LEARNING OUTCOMES:-**

On completion of this course, learners will be able to:-

1. To understand the concept of Region and Regional Planning.
2. To familiarize the students with Theories and Models for Regional Planning.
3. To develop understanding about concept of Development, Sustainable Development and Multi level planning.

### **COURSE CONTENT:-**

#### **UNIT-I**

Definition of Region, Evolution and objectives of regional planning. Planning practices in Ancient India., Types of Regional planning, Formal, Functional, and Planning Regions.

#### **UNIT-II**

Delimitations of Region and Regional Planning. Theories and Models for Regional Planning: Growth Pole Model of Perroux; Myrdal, Hirschman, Rostow and Friedman.

#### **UNIT-III**

Sustainable Development, Concept of Development and Underdevelopment, Indicators (Economic, Social and Environmental), Gandhian thought of Rural Development.

#### **UNIT-IV**

Need for regional planning in India, Thought of Five Year Plans and Regional Planning, multi- level planning in India, Participatory Planning, Role of Panchayati Raj Institutions and Urban Local Bodies.

### **SUGGESTED READINGS:**

1. Misra, R. P., Sundaram, K.V., and Rao, V.L.S. (1974). *Regional Development planning in India*. Delhi, India: Vikas Publishing House.
2. Singh, M B, () Pradeshik Vikas Niyogan, Tara Book Agency, Varanasi.
3. Peet, R. (1999). *Theories of Development*. New York, USA: The Guilford Press.
4. Bhat L.S. (1972): *Regional Planning In India*, Statistical Publishing Society.
5. Blij H. J. De, 1971: *Geography: Regions and Concepts*, John Wiley and Sons.
6. Kundu, A. (1992): *Urban Development Urban Research in India*, Khanna Publ. New Delhi.
7. Misra, R.P (1992): *Regional Planning: Concepts , techniques , Policies and Case Studies , Concept , New Delhi*.

## B. A. (GEOGRAPHY) 2<sup>ND</sup> YEAR, SEM-4

PAPER / TITLE	P-8 / STATISTICAL METHODS AND MAP ANALYSIS (PRACTICAL)	TOTAL MARKS	100
CREDITS	04	Written Exam	75
CORE / ELECTIVE	CORE	Record File	10
THEORY / PRACTICAL	PRACTICAL	Viva-Voce	10
		Attendance	05

### COURSE OBJECTIVES:

After Completion of the Course Students will be able:-

1. Students will acquaint with different statistical techniques.
2. Use of techniques in research methodology.
3. Understanding relationship between geography and statistical methods.

### COURSE LEARNING OUTCOMES:

On completion of this course, learners will be able to:-

1. Understand the basics of data collection and processing for the meaningful outcomes.
2. Comprehend the representation and interpretation of the results.
3. Put into practice results obtained in representation as well as day-to-day life.

### COURSE CONTENT:-

#### UNIT-I

Statistical Methods in Geography; Central Tendency (Mean, Median and Mode), Standard Deviation and co-relation (Karl Pearson's & Spearman's).

#### UNIT-II

Weather Map; weather Elements, weather conventional symbols, Interpretation of weather Maps and Weather forecasting, Hythergraph, Climograph.

#### UNIT-III

Geological Map: Types, Sign, Bed & Bedding Plane, Rock outcrop, Dip, Strike etc. construction of Geological sections.

#### UNIT-IV

Interpretation of aerial photograph and Satellite imageries, Geo-referencing, Remote Sensing and GIS data processing and applications, Application of GIS Packages like ARC GIS, ERDAS, QGIS and Use of GPS.

### SUGGESTED READINGS:

1. Berry, B. J. L. and Marble, D. F. (eds.): *Spatial Analysis--A Reader in Geography*.
2. Mahmood, A., 1977: *Statistical Methods in Geographical Studies*, Concept.
3. Pal, S. K., (1998): *Statistics for Geoscientists*, Tata McGraw Hill, New Delhi.
4. Rogerson, P. A., (2001) *Statistical Methods for Geography*, Sage Publications, New Delhi.
5. Shinha, Indira., (2007): *Sankhyikibhugol (Hindi)*. Discovery Publishing House, New Delhi.
6. Silk, J., (1979): *Statistical Concepts in Geography*, Allen and Unwin, London.

## **B. A. (GEOGRAPHY) 2<sup>ND</sup> YEAR, SEM-4 (MINOR)**

<b>PAPER / TITLE</b>	<b>Q-4 / REGIONAL PLANNING &amp; DEVELOPMENT</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	02	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	MINOR	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	<ul style="list-style-type: none"><li>• <b>ASSIGNMENT</b> : 10</li><li>• <b>PRESENTATION</b> : 10</li><li>• <b>ATTENDANCE</b> : 05</li></ul>	

### **COURSE OBJECTIVES:-**

After Completion of the Course Students will be able:-

1. The students will be able to understand and analyse the principal issues confronting the regions today.
2. The students will get an insight into 'how regions work', through case-study from India.
3. The students will be able to understand and analyse the principal issues confronting the different regions of India.

### **COURSE LEARNING OUTCOMES:-**

On completion of this course, learners will be able to:-

1. To understand the concept of Region and Regional Planning.
2. To familiarize the students with Theories and Models for Regional Planning.
3. To develop understanding about concept of Development, Sustainable Development and Multi level planning.

### **COURSE CONTENT:-**

#### **UNIT-I**

Definition of Region, Evolution and objectives of regional planning. Planning practices in Ancient India., Types of Regional planning, Formal, Functional, and Planning Regions. Delimitations of Region and Regional Planning.

#### **UNIT-II**

Sustainable Development, Concept of Development and Underdevelopment, Indicators (Economic, Social and Environmental), Gandhian thought of Rural Development. Multi- level planning in India, Participatory Planning, Role of Panchayati Raj Institutions and Urban Local Bodies, NITI Aayog.

### **SUGGESTED READINGS:**

1. Misra, R. P., Sundaram, K.V., and Rao, V.L.S. (1974). *Regional Development planning in India*. Delhi, India: Vikas Publishing House.
2. Singh, M B, () Pradeshik Vikas Niyogan, Tara Book Agency, Varanasi.
3. Peet, R. (1999). *Theories of Development*. New York, USA: The Guilford Press.
4. Bhat L.S. (1972): *Regional Planning In India*, Statistical Publishing Society.
5. Blij H. J. De, 1971: *Geography: Regions and Concepts*, John Wiley and Sons.
6. Kundu, A. (1992): *Urban Development Urban Research in India*, Khanna Publ. New Delhi.
7. Misra, R.P (1992): *Regional Planning: Concepts, techniques, Policies and Case Studies*, Concept, New Delhi.

## B. A. (GEOGRAPHY) 3<sup>RD</sup> YEAR, SEM-5

<b>PAPER / TITLE</b>	<b>P-9 / GEOGRAPHY OF TOURISM</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	CORE	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	<ul style="list-style-type: none"><li>• <b>ASSIGNMENT : 10</b></li><li>• <b>PRESENTATION : 10</b></li><li>• <b>ATTENDANCE : 05</b></li></ul>	

### COURSE OBJECTIVES:

After Completion of the Course Students will be able:-

1. To understand different types of tourism and the geography associated with them.
2. To understand different aspects of tourism-market, demand & dimensions of tourism.
3. To understand tourism in India, its evolution and development in different tourist places.

### COURSE LEARNING OUTCOMES:

On completion of this course, learners will be able to:-

1. Students will be familiar with different dimensions of tourism.
2. Students will be able to know how it will be helpful in providing employment and development of Indian economy.

### COURSE CONTENT:-

#### UNIT-I

Concepts, Nature and Scope; Inter-Relationships of Tourism, Geographical Parameters of Tourism by Robinson. Types of Tourism: Natural Tourism, Cultural Tourism, Medical Tourism, Pilgrimage.

#### UNIT-II

Recent Trends of Tourism: International and Regional; Domestic (India); Eco Tourism, Sustainable Tourism, Meetings, Incentives, Conventions and Exhibitions (MICE).

#### UNIT-III

Impact of Tourism: Economy; Environment; Society.

#### UNIT-IV

Tourism in India: Tourism Infrastructure; Case Studies of Himalaya, Desert, Coastal and Heritage Tourism; National Tourism Policy.

### SUGGESTED READINGS:

1. Dhar, P.N. (2006) International Tourism: Emerging Challenges and Future Prospects. Kanishka, New Delhi.
2. Hall, M. and Stephen, P. (2006) Geography of Tourism and Recreation–Environment, Place and Space, Routledge, London.
3. Page, S. J. (2011) Tourism Management: An Introduction, Butterworth Heinemann- USA. Chapter 2.
4. Raj, R. and Nigel, D. (2007) Morpeth Religious Tourism and Pilgrimage Festivals Management: An International perspective by, CABI, Cambridge, USA, [www.cabi.org](http://www.cabi.org).
5. Tourism Recreation and Research Journal, Centre for Tourism Research and Development, Lucknow.

## B. A. (GEOGRAPHY) 3<sup>RD</sup> YEAR, SEM-5

<b>PAPER / TITLE</b>	<b>P-10 / ENVIRONMENT GEOGRAPHY</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	CORE	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	<ul style="list-style-type: none"><li>• <b>ASSIGNMENT : 10</b></li><li>• <b>PRESENTATION : 10</b></li><li>• <b>ATTENDANCE : 05</b></li></ul>	

### COURSE OBJECTIVES:-

After Completion of the Course Students will be able:-

1. To understand and define the natural environment.
2. To understand the problems and prospects of environmental pollution.
3. To understand recent legislations related to environment conservation.

### COURSE LEARNING OUTCOMES:-

On completion of this course, learners will be able to:-

1. Students will be able to assess the relationship between the human environments in different regions.
2. Students will be able to understand the various concepts of biodiversity and the Functional Structure of ecosystem.
3. Students will be able to know how environment protection is being done in developed and developing countries.

### COURSE CONTENT:-

#### UNIT-I

Concepts & components of Environment, Ecology and ecosystem. Indian traditional Knowledge in Environment and disaster Management, Bio-diversity and its conservation, sustainable development.

#### UNIT-II

Deforestation, soil erosion, soil exhaustion, Desertification, Air pollution, Water pollution, Noise Pollution Disposal of solid waste, Green House Gases and Global Warming, Intuitional Initiatives Ganga Action Plan, Tiger project, Tehri dam & Narmada Valley project.

#### UNIT-III

Understanding Climate Change; Global Climatic Assessment – IPCC, Impacts of Climate Change, National Action Plan on Climate Change.

#### UNIT-IV

Disasters, Hazards, Risk, Vulnerability, Type of Disasters, Disaster Management, Disaster Management, Flood, Drought, Cyclone, Earthquake, Tsunami, Landslide, Chemical and Nuclear Disasters. Do's and Don'ts During Disasters.

### SUGGESTED READINGS:

1. Casper J. K. (2010). *Changing Ecosystems: Effects of Global Warming*. New York, USA: Infobase Pub.
2. Singh, R. B. (1993) *Environmental Geography*. Delhi, India: Heritage Publishers.
3. Government of India. (2011). *Disaster Management in India*. Delhi, India: Ministry of Home Affairs.
4. Singh, Savendra (2019) *Pryavaran Bhugol*, Pravalika Publication, Allahabad.
5. Kapur, A. (2010). *Vulnerable India: A Geographical Study of Disasters*. Delhi, India: Sage Publication.
6. Singh, Savendra (2019) *Apada Prabandhan*, Pravalika Publication, Allahabad.
7. Ramkumar, M. (2009). *Geological Hazards: Causes, Consequences and Methods of Containment*. New Delhi, India: New India Publishing Agency.
8. *Climate Change and Vulnerability: Physical Vulnerability; Economic Vulnerability; Social Vulnerability*.
9. *Impact of Climate Change: Agriculture and Water; Flora and Fauna; Human Health*.
10. *Adaptation and Mitigation: Global Initiatives with Particular Reference to South Asia*.
11. Bansal S C.(2020) *Jalvayu vigyan evam Samudra Vigyan*, Meenakshi Publication, Meerut.
12. Bansal S C.(2019) *Prayavarn ek adhyan*, Meenakshi Publication, Meerut.

**B. A. (GEOGRAPHY) 3<sup>RD</sup> YEAR, SEM-5**

<b>PAPER / TITLE</b>	<b>INTERNSHIP / TERM PAPER / MINOR PROJECT IN MAJOR-A</b>	<b>Total Marks</b>	<b>100</b>
<b>CREDITS</b>	<b>(TO BE DECIDED BY STUDENTS IN SEMESTER-5)</b>		
<b>CORE / ELECTIVE</b>	<b>4</b>		
<b>THEORY / PRACTICAL</b>			

**COURSE OBJECTIVES:**

After Completion of the Course Students will be able:-

1. This course attempts to introduce the students to the basic knowledge related to geographical field research design.
2. The course examines the questions related to data collection, methods and its analysis.
3. It also critically evaluates the dissertation based on field survey

**COURSE LEARNING OUTCOMES:**

On completion of this course, learners will be able to:-

1. The students will be able to understand basic concepts of field research methods and research design in geography.
2. The students will be able to do field work through practical experience and get skills of data collection methods and processing and analysis of obtained data.
3. The students will be able to write dissertation based on field work on given topic

## B. A. (GEOGRAPHY) 3<sup>RD</sup> YEAR, SEM-6

<b>PAPER / TITLE</b>	<b>P-11 / EVOLUTION OF GEOGRAPHICAL THOUGHT</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	CORE	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	<ul style="list-style-type: none"><li>• <b>ASSIGNMENT : 10</b></li><li>• <b>PRESENTATION : 10</b></li><li>• <b>ATTENDANCE : 05</b></li></ul>	

### **COURSE OBJECTIVES:**

After Completion of the Course Students will be able:-

1. This course aims to provide knowledge of disciplinary developments ancient to till now.
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 as against imperial underpinnings and latent Eurocentricity.

### **COURSE LEARNING OUTCOMES:**

On completion of this course, learners will be able to:-

1. A thorough knowledge of the growth, development, philosophical influences and relevance of geography from ancient to the present time.
2. Knowledge of emerging areas and new theorisations within the discipline.
3. An appreciation of the discipline's dynamic and inclusive nature.

### **COURSE CONTENT:-**

#### **UNIT-I**

Nature and scope of Geography, Main Concepts of Geography, Early Origins of Geographical thinking. Concepts of Distributions; Relationships, interactions, Areal Differentiation and Spatial Organization in Geography.

#### **UNIT-II**

Dualisms in geography; systematic & Regional geography, physical & human geography, The myth and reality about dualisms, Contribution of Indian Geographers in Ancient India.

#### **UNIT-III**

Contribution of Greek & Roman geographers in ancient world, Contribution of Arab geographers in Middle ages, Renaissance period in Europe. Renowned travelers and their geographical discoveries, German school of thought - Kant, Humboldt, Ritter, Richthofen, Ratzel, Hettner French school of thought - Contribution of Blache & Brunhes.

#### **UNIT-IV**

Soviet geographers, American school - Contribution of E. C. Sample, Ellsworth Huntington & Carl Sauer. British school - Contribution of Mackinder, Herbertson & L.D. Stamp, Paradigms in Geography, Thomas Kuhn theory about the growth and development of science and Application.

### **SUGGESTED READINGS:**

1. Ali, S.M. (1960): Arab Geography, Institute of Islamic Studies, Aligarh Muslim University, Aligarh, First Edition.
2. Daniel, P., Bradshaw, M., Shaw, D. and Sidaway, J. (2000): Human Geography. Issues for the 21st Century. Prentice Hall, London.
3. Diddee, J. (ed.) (1990): Indian Geography, Institute of Indian Geographers, Pune, first edition.
4. Dikshit, R. D. (2003): Geographical Thought. A Critical History of Ideas. Prentice-Hall of India, New Delhi. (in English and Hindi).
5. Dube, B. (1967): Geographical Concepts in Ancient India, National Geographical Society of India, Varanasi.
6. Hartshorne, R. (1959): Perspective on the Nature of Geography, John Murray, London.
7. Harvey, D. (1969): Explanations in Geography. Arnold, London.
8. Holt-Jensen, A. (1980): Geography: Its History and Concepts. Harper and Row Publishers, London.
9. Husain, Majid. (2002): Evolution of Geographical Thought, Rawat Publications, Jaipur.
10. Taylor, G. (ed.) (1953): Geography in the Twentieth Century. Methuen and Company, London.

## B. A. (GEOGRAPHY) 3<sup>RD</sup> YEAR, SEM-6

<b>PAPER / TITLE</b>	<b>P-12 / SURVEYING, SURVEY AND FIELD TRIP, REPORT WRITING (PRACTICAL)</b>	<b>TOTAL MARKS</b>	<b>100</b>
		<b>Written Exam</b>	<b>50</b>
		<b>Record File</b>	<b>10</b>
		<b>Tour / Field Report</b>	<b>25</b>
<b>CREDITS</b>	04	<b>Viva-Voce</b>	<b>10</b>
<b>CORE / ELECTIVE</b>	CORE	<b>Attendance</b>	<b>05</b>
<b>THEORY / PRACTICAL</b>	PRACTICAL		

### COURSE OBJECTIVES:

After Completion of the Course Students will be able:-

1. To understand the importance of practical work in geography.
2. To understand the relevance of surveying in geography.
3. To develop a understanding of surveying instruments.
4. To understand the lithosphere through field work.

### COURSE LEARNING OUTCOMES:

On completion of this course, learners will be able to:-

1. Creativity will be developed in the students towards field survey.
2. Students will be familiar with various tools and techniques of cartography.
3. Field observation and report writing skills will be developed in Students.

### COURSE CONTENT:

#### UNIT-I

Surveying; Meaning, Types and methods of surveying,

#### UNIT-II

Plane table and Prismatic Compass surveying.

#### UNIT-III

Indian Clinometer and Dumpy Level surveying.

#### UNIT-IV

**Field Trip and Report Writing:** Mountain / Desert / Plateau / Costal Region, Designing the field report: Aims and Objectives, Methodology, Analysis, Interpretation and writing the report based on field observations, photographs, sketch etc. or **Socio-economic survey:** Socio-economic survey: Selection of Area, Objectives, Methodology, Questionnaire, Data Collection, Entry and Tabulation and its interpretation.

### SUGGESTED READINGS:

1. Sharma, J. P. (2019), Proyagatmak bhoogol, Rastogi Publication Meerut.
2. Singh, R. L. and Singh, Rana P.B. (1993), Elements of Practical Geography. (Hindi and English editions), Kalyani Publishers, Ludhiana and New Delhi.
3. Davis, R.E. and Foote, F.S. (1953) : Surveying, 4<sup>th</sup> edition, McGraw Hill Publication, New York.
4. Kanetker, T. P. and Kulkarni, S. V. (1967); Surveying and Levelling, Vol-I and II V.G. Prakashan, Poona.
5. Natrajan, V. (1976), Advances Surveying, B.I Publication, Mumbai.
6. Pugh, J.C. (1975), Surveying for field Scientists, Methuen and Company Ltd. London, First Publication.
7. Punmia, B.C. (1994), Surveying, Vol. I, Laxmi Publication Private Ltd., New Delhi.
8. Shephard, F. A. (1968), Surveying Problems and Solutions, Edward Arnold (Publishers) Ltd. London.
9. Venkatramaiah, C. (1997), A Text Book of Surveying, Universities Press, Hyderabad.

## B. A. (GEOGRAPHY) 3<sup>RD</sup> YEAR, SEM-6

<b>PAPER / TITLE</b>	<b>P-13 'A' / AGRICULTURE GEOGRAPHY</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	ELECTIVE	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	<ul style="list-style-type: none"><li>• <b>ASSIGNMENT : 10</b></li><li>• <b>PRESENTATION : 10</b></li><li>• <b>ATTENDANCE : 05</b></li></ul>	

### COURSE OBJECTIVES:

After Completion of the Course Students will be able:-

1. This course attempts to introduce the students to the nature and origin of agriculture and its regions.
2. The course examines the questions related to agricultural development and productivity in India.
3. It also critically evaluates the environmental consequences and emerging perspective and policies and interventions aimed at sustainable agriculture

### COURSE LEARNING OUTCOMES:

On completion of this course, learners will be able to:-

1. Conceptualize the agriculture and its determinants.
2. Get the overview of Indian and World agriculture regions and systems.
3. Have sound knowledge of agriculture revolutions and food security

### COURSE CONTENT:-

#### UNIT-I

Introduction, Definition, nature and scope Agricultural Geography, Land use/ land cover definition and classification, Determinants of Agriculture: Physical, Institutional and organizational.

#### UNIT-II

Agricultural Regions of India: Agro-climatic, Agro-ecological, Cropping Patterns, Cropping Intensity, Crop Combination Regions, crop Diversification.

#### UNIT-III

Agricultural Systems of the World (Whittlesey's classification) and Agricultural Land use model (Von Thunen, modification and relevance).

#### UNIT-IV

Food Security: Concept, approaches, pattern, Agriculture revolution and government policies.

### SUGGESTED READINGS:

1. Basu, D.N., and Guha, G.S., (1996): *Agro-Climatic Regional Planning in India*, Vol.I& II, Concept Publication, New Delhi.
2. Bryant, C.R., Johnston, T.R, (1992): *Agriculture in the City Countryside*, Belhaven Press, London.
3. Burger, A., (1994): *Agriculture of the World*, Aldershot, Avebury.
4. Grigg, D.B., (1984): *Introduction to Agricultural Geography*, Hutchinson, London.
5. Hussain, M. (1996): *Systematic Agricultural Geography*, Rawat Publications, Jaipur.
6. Ilbery, B. W., (1985): *Agricultural Geography: A Social and Economic Analysis*, Oxford University Press.
7. Mohammad, N., (1992): *New Dimension in Agriculture Geography*, Vol. I to VIII, Concept Pub., New Delhi.
8. Roling, N.G., and Wageruters, M.A.E.,(ed.) (1998): *Facilitating Sustainable Agriculture*, Cambridge University Press, Cambridge.
9. Shafi, M., (2006): *Agricultural Geography*, Doring Kindersley India Pvt. Ltd., New Delhi.
10. Singh, J., and Dhillon, S.S., (1984): *Agricultural Geography*, Tata McGraw Hill, New Delhi.
11. Tarrant, J. R., (1973): *Agricultural Geography*, David and Charles, Devon.

## B. A. (GEOGRAPHY) 3<sup>RD</sup> YEAR, SEM-6

<b>PAPER / TITLE</b>	<b>P-13 'B' / DISASTER MANAGEMENT</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	ELECTIVE	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	<ul style="list-style-type: none"><li>• <b>ASSIGNMENT : 10</b></li><li>• <b>PRESENTATION : 10</b></li><li>• <b>ATTENDANCE : 05</b></li></ul>	

### COURSE OBJECTIVES:

After Completion of the Course Students will be able:-

1. To create awareness about various disasters in context of India, their distribution over space and time of occurrence.
2. To equip students with various methods of prevention, mitigation and rehabilitation processes.

### COURSE LEARNING OUTCOMES:

On completion of this course, learners will be able to:-

1. After undertaking this course the student will be aware of the types of disasters-natural and man-made.
2. The student will learn how to map and mitigate disasters.
3. The students will master the disaster studies in India and various government policies of disaster management.

### COURSE CONTENT:-

#### UNIT-I

Disasters: Definition and Concepts: Hazards, Disasters; Risk and Vulnerability; Classification, Natural Hazards and Disasters, Earthquake, Tsunami, Landslides, Cyclones, Floods, Drought, Desertification Distribution and Mapping.

#### UNIT-II

Manmade Disasters: Causes, Impact, Distribution and Mapping, Disaster Management, NDMA and NIDM; Indigenous Knowledge and Community-Based Disaster Management; Do's and Don'ts During and Post Disasters.

#### UNIT-III

Harnessing Information and Technology: Application of G.I.S., G.P.S. and Remote Sensing in Disaster Management.

#### UNIT-IV

Disaster in Indian Context: A Regional Survey of Land Subsidence, Coastal Disaster, Cyclonic Disaster and Disaster in Hills, Terror Attacks, Communal Clashes, Remedial Measures, National and International Policies of Disaster Management.

### SUGGESTED READINGS:

1. Government of India. (1997) Vulnerability Atlas of India. New Delhi, Building Materials & Technology Promotion Council, Ministry of Urban Development, Government of India.
2. Kapur, A. (2010) Vulnerable India: A Geographical Study of Disasters, Sage Pub, New Delhi.
3. Modh, S. (2010) Managing Natural Disaster: Hydrological, Marine and Geological Disasters, Macmillan, Delhi.
4. Singh, R.B. (2005) Risk Assessment and Vulnerability Analysis, IGNOU, New Delhi.
5. Singh, R. B. (ed.), (2006) Natural Hazards and Disaster Management: Vulnerability and Mitigation, Rawat Publications, New Delhi.
6. Sinha, A. (2001). Disaster Management: Lessons Drawn and Strategies for Future, New United Press, New Delhi.
7. Stoltman, J.P. et al. (2004) International Perspectives on Natural Disasters, Kluwer Academic Publications. Dordrecht.
8. Singh Jagbir (2007) "Disaster Management Future Challenges and Opportunities", 2007. Publisher I.K. International Pvt. Ltd. S-25, Green Park Extension, Uphaar Cinema Market, New Delhi, India.

## B. A. (GEOGRAPHY) 3<sup>RD</sup> YEAR, SEM-6

<b>PAPER / TITLE</b>	<b>P-13 'C' / SOCIAL GEOGRAPHY</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	ELECTIVE	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	<ul style="list-style-type: none"><li>• <b>ASSIGNMENT</b> : 10</li><li>• <b>PRESENTATION</b> : 10</li><li>• <b>ATTENDANCE</b> : 05</li></ul>	

### COURSE OBJECTIVES:

After Completion of the Course Students will be able:-

1. To create awareness about various disasters in context of India, their distribution over space and time of occurrence.
2. To equip students with various methods of prevention, mitigation and rehabilitation processes.

### COURSE LEARNING OUTCOMES:

On completion of this course, learners will be able to:-

1. After undertaking this course the student will be aware of the types of disasters-natural and man-made.
2. The student will learn how to map and mitigate disasters.
3. The students will master the disaster studies in India and various government policies of disaster management.

### COURSE CONTENT:-

#### UNIT-I

Emergence of Social Geography, meaning, scope and significance of social Geography, Social Geography as an applied branch of Human Geography, relationship of social Geography with other social sciences.

#### UNIT-II

Social well being, and its indicators, Human Development Index (HDI), inclusive growth, social segregation and ghetto formation, social exclusion.

#### UNIT-III

Gender Issues and social changes, Gender inequality, women empowerment, women literacy and health, social change with special reference to caste and tribal groups, Environment & Human health.

#### UNIT-IV

Social Differentiation and Region formation, Spatial distribution of tribes, castes and linguistic groups. Relationship between social identity and Economic conditions.

### SUGGESTED READINGS:

1. Gardern, J.F., Geography as a Social.
2. Gregory, D & Urry, J. Social Relations.
3. Hammely, chris, (Ed.) Social Geography : A Reader.
4. Harvey, D. Social Justice and the City.
5. John, E. (ed.) Social Geography in International Perspective.
6. Jones, E. (Ed.) Readings in Social Geography.
7. Jones. E. & Eyles, J., An Introduction to Social Geography.
8. Pacliona, A (ed.) Social Geography, Progress and Prospects.
9. Paul Knox, Social Well-being, A Spatial Perspective.
10. Rao, M.S.A, Urbanization and Social Change.

## B. A. (GEOGRAPHY) 4<sup>TH</sup> YEAR, SEM-7

<b>PAPER / TITLE</b>	<b>P-14 / GEOMORPHOLOGY</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	CORE	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	<ul style="list-style-type: none"><li>• <b>ASSIGNMENT : 10</b></li><li>• <b>PRESENTATION : 10</b></li><li>• <b>ATTENDANCE : 05</b></li></ul>	

### COURSE OBJECTIVES:

After Completion of the Course Students will be able:-

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.

### COURSE LEARNING OUTCOMES:

On completion of this course, learners will be able to:-

1. Explain basic principles for development of landforms through time.
2. Make an initial geomorphological fieldwork.
3. To provide the fundamental and advanced level knowledge of the subject.

### COURSE CONTENT:-

#### UNIT-I

Methods and approaches to the study of landforms; Basic concepts in geomorphology: Structures, Processes and Scales (Stage/Time); Theories of landscape development.

#### UNIT-II

Isostasy – Doctrine of Isostasy, Views of Airy and Pratt, Concept of Plate tectonics; Mass movement of rock waste and resultant landforms; Concept, Evolution and Classification slopes; Theories of slope development.

#### UNIT-III

Fluvial (Process) Geomorphology, Morphometry of drainage basins; Profile of equilibrium; Channel morphology; Climatic Geomorphology and Morphogenetic regions.

#### UNIT-IV

Structural Geomorphology, Fold, Fault and Dormal Structures and Landforms; Palaeo and Neo–Geomorphology– Denudation Chronology of peninsular India and Himalayas, Continental Drift Theory– concept of Wegener, Mountain Building Theories – concepts of Kober, Daly and Holmes.

Geomorphic hazards and mitigation measures; Geomorphology and economic deposits; Geomorphology in groundwater studies, Soils and geomorphology, Terrain classification and its applications.

### SUGGESTED READINGS:

1. Allison, Robert (ed.) 2002. *Applied Geomorphology: Theory and Practice*, John Wiley & Sons Ltd., Chichester, U.K.
2. Anderson, R.S. and Anderson, S.P. 2010. *Geomorphology: The Mechanics and Chemistry of Landscapes*, Cambridge University Press, Cambridge.
3. Bierman, P.R. and Montgomery, D.R. 2014. *Key Concepts in Geomorphology*, Macmillan Education, New York.
4. Bloom, A.L. 2003. *Geomorphology: A Systematic Analysis of Late Cenozoic Landforms*, Prentice-Hall of India, New Delhi.
5. Bridges, E.M. 1990. *World Geomorphology*, Cambridge University Press, Cambridge, U.K.
6. Huggett, R.J. 2011. *Fundamentals of Geomorphology*, Routledge, New York.
7. Kale, V.S. and Gupta, A. 2001. *Introduction to Geomorphology*, Orient Longman, Hyderabad, India.
8. Schumm, S.A. 1977. *The Fluvial System*, John Wiley & Sons, Inc., New York.
9. Singh Savindra. 2014, भू-आकृतिविज्ञान का स्वरूप, Prayag Pustak Bhawan, Allahabad.
10. Summerfield, M.A. 1991. *Global Geomorphology*, Pearson Prentice Hall, U.K.
11. Thornbury, W.D. 1969. *Principles of Geomorphology*, John Wiley and Sons, New York.

## B. A. (GEOGRAPHY) 4<sup>TH</sup> YEAR, SEM-7

<b>PAPER / TITLE</b>	<b>P-15 / CLIMATOLOGY</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	CORE	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	<ul style="list-style-type: none"><li>• <b>ASSIGNMENT : 10</b></li><li>• <b>PRESENTATION : 10</b></li><li>• <b>ATTENDANCE : 05</b></li></ul>	

### COURSE OBJECTIVES:

After Completion of the Course Students will be able:-

1. This course aims to provide knowledge of Earth's atmosphere
2. It aims to enable students to contextualize the conceptual traditions and recent techniques in climatologically understanding
3. It promotes an understanding of the fluidity, expansion and inclusivity of Modern Research in Earth Science

### COURSE LEARNING OUTCOMES:

On completion of this course, learners will be able to:-

1. A thorough knowledge of the growth, development, philosophical influences and relevance of climatology in geography from ancient to the present time.
2. Knowledge of emerging areas and new theorisations within the discipline.
3. An appreciation of the discipline's dynamic and inclusive nature.

### COURSE CONTENT:-

#### UNIT-I

Nature and scope of climatology and its relationship with meteorology, The atmosphere: Structure and composition, insolation, heat-balance of the earth. Distribution of temperature: Temporal, vertical and horizontal.

#### UNIT-II

Atmospheric Equilibrium: Stability and instability, potential temperature and evapo-transpiration. Distribution of atmospheric pressure and winds: Jet streams - their origin, types and distribution, monsoon winds.

#### UNIT-III

Climatic Phenomena: Air masses and fronts, origin, growth, classification. Frontogenesis, types and weather associated with fronts. Cyclones, and anticyclones, Global warming.

#### UNIT-IV

Climatic Classifications: Koppen's Thornthwaites - A critical appraisal of each classification, Climates of the World: Tropical, Temperate, Desert. Interpretation and generation of climatic information, soils, agricultural activities. Global Climatic Change: Evidences; Role of "Earth Summit" Conferences; Air Pollution; Acid Rain; Ozone Depletion; Greenhouse Effect and Global Warming; Weather Forecasting. Climate change and Agriculture.

### SUGGESTED READINGS:

1. Menon, P.A. (1989), Our Weather, N.B.T., New Delhi.
2. Das, P.K. (1987), Monsoons, National Book Trust, New Delhi.
3. Fein, J.S. and Stephens, P.N. (1987), Monsoons, Wiley, London.
4. Peterson, S. (1969), Introduction to Meteorology, McGraw Hill Book, London.
5. Barry, R.G. and Chouly, R.J., (2004), Atmosphere, Weather and Climate, Methuen, London.
6. Bhutani S., (2000), Our Atmosphere, Kalyanai Publishers, New Delhi.
7. Lal, D.S. (1993), Climatology, Chaitanya Publishing House, Allahabad.
8. Riehl, H. (1968), Introduction to Atmosphere, McGraw Hill, New York.
9. Robinson, P.J. and Sellers, H. (1986), Contemporary Climatology, Longman, London.
10. Trewartha, G.T. (Latest edition) Introduction to Climate, McGraw Hill, New York.

## B. A. (GEOGRAPHY) 4<sup>TH</sup> YEAR, SEM-7

<b>PAPER / TITLE</b>	<b>P-16 / SETTLEMENT GEOGRAPHY</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	CORE	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	<ul style="list-style-type: none"><li>• <b>ASSIGNMENT : 10</b></li><li>• <b>PRESENTATION : 10</b></li><li>• <b>ATTENDANCE : 05</b></li></ul>	

### COURSE OBJECTIVES:

After Completion of the Course Students will be able:-

1. This course attempts to acquaint the students with urban issues and components.
2. The course examines the questions related to urban poverty and slums in India.
3. It also critically evaluates the infrastructure development and programmes & policies aimed at sustainable urban development and management strategies.

### COURSE LEARNING OUTCOMES:

On completion of this course, learners will be able to:-

1. The students will be able to understand the concepts and components of urban development and management.
2. The students will be able to analyse the urban poverty and slums at different scales.
3. The students will be able to get updated knowledge of urban infrastructure development management and urban governance.

### COURSE CONTENT:-

#### UNIT-I

Settlement Geography: Meaning, Definition & Scope; Approaches to Study; Theories of Evolution of Human Settlement; Size & Distributions with Theoretical Models; Settlement Hierarchy :Christaller & Losch; Hierarchy of Settlement in India.

#### UNIT-II

Site & Situation of Rural Settlement; The Evolution of Street Pattern in Rural Settlements; Morphological Characteristics of Rural Settlement; The Evolution of Field Boundaries & the Field Patterns; Fold Housing; Folk Architecture & Traditional Building Material.

#### UNIT-III

Urban Settlements; Their Site & Situation; Size & Spacing of Urban Settlement; Christaller's System of Urban Hierarchy & Spacing of Cities; Morphological Characteristics of Urban Settlement; Models of Urban Settlements; Problems of Urban Housing & Emergence of Slums.

#### UNIT-IV

Urbanization & Urban Functions; Concept of Urbanization; Factors of Urbanization; Trends of Urbanization in the World; Functional Classification of Towns & Cities; Rural-Urban Fringe; Urban Planning & Management. Development of Population and Settlement Geography in less developed countries and more developed countries.

### SUGGESTED READINGS:

1. Dickinson, R.E. 1968 :City and Region: A Geographical Interpretation, Routledge and Kegan Paul Ltd. London.
2. Ghosh, S. 1998:Introduction to Settlement Geography, Orient Longman Ltd., Calcutta: 158p.
3. Hardoy, J. E., Mittin, D. & Satterthwaite, D. 1992 : Environmental Problems in the World Cities, Earthscan Pub. Ltd. London.
4. Hussain, M. 1994: Human Geography, Rawat Pub. Co., New Delhi: 485p.
5. Mandal, R.B. 1988 : Systems of Rural Settlements in Developing Countries, Concept Pub. Co., New Delhi.
6. Misra. H.N. (ed) 1987 :Contributions to Indian Geography, Volume 9: Rural Geography, Heritage Pub., New Delhi.
7. Racine, J. (ed) :Calcutta 1981, Concept Pub. Co., New Delhi.
8. Ramachandran R. 1989 : Urbanisation and Urban Systems in India, Oxford University Press, New Delhi.

## B. A. (GEOGRAPHY) 4<sup>TH</sup> YEAR, SEM-7

<b>PAPER / TITLE</b>	<b>P-17 / POLITICAL GEOGRAPHY</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	CORE	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	<ul style="list-style-type: none"><li>• <b>ASSIGNMENT</b> : 10</li><li>• <b>PRESENTATION</b> : 10</li><li>• <b>ATTENDANCE</b> : 05</li></ul>	

### COURSE OBJECTIVES:

After Completion of the Course Students will be able:-

1. This course aims to provide knowledge of Political Geography
2. It aims to enable students to contextualize the conceptual traditions and recent techniques in understanding neighbours and boundary
3. It promotes an understanding of the fluidity, expansion and inclusivity of Geo-politics

### COURSE LEARNING OUTCOMES:

On completion of this course, learners will be able to:-

1. A thorough knowledge of the growth, development, philosophical influences and relevance of political theories in geography from ancient to the present time.
2. Knowledge of emerging areas and new theorizations within the discipline.
3. This course provides students with an overview and fundamental understanding of the ways in which political issues are dealt with through geographical and spatial perspectives.

### COURSE CONTENTS:

#### UNIT-I

Definition and Historical Development of Political Geography, Recent Trends and Development in Political Geography, Distinction between Geo-Politics and Political Geography.

#### UNIT-II

Definition and Components of State, Definition of Nation and Nation State, Nationalism/ Nation Building, Geographical factors of State, Physical, Spatial and Human & Economic, Definition of Boundary and Frontier and their Classification.

#### UNIT-III

Mackinder's Geographical Pivot and Heartland Model, Spykman's Rimland Model, Geostrategic idea of A.T. Mahan, Critical Assessment of Heartland and Rimland Model and their Relevance to World' Geo politics.

#### UNIT-IV

India as a Federal country, India as a Unitary or Union of States, Concept and Definition of geography of Election or Electoral Geography, Approaches to Study of Election / Electoral Geography, Geography of Voter Participation. Geopolitical significance of the Indian Ocean; Role of third world countries; Political geography and regional co-operation; Geopolitical study of South-East Asia and South Asia, Politics of World Resources.

### SUGGESTED READINGS:

1. Agnew, J.A. (1987), Place and Politics, Boston : Allen and Unwin.
2. Blacksell, Mark (2003), Political Geography, London Routledge.
3. Cox, Kevin R. (2008) The Sage Handbook of Political Geography, New Delhi sage.
4. Dicken, Peter (2003), Global Shift, New Delhi : Sage.
5. Dikshit, R.D. (2000) Political Geography: The Spatiality of Politics, New Delhi : Tata Mc Graw Hill.
6. Khor, Martin (2001) Rethinking in Globalization, London : Zed Books.
7. Painter J. (1995) Politics, Geography and Political Geography, London : Arnold.
8. Taylor, P.J. and Colin Flint (2001), Political Geography, New Delhi : Pearson.
9. Taylor, P.J. and R.J. Johnston (1979), Geography of Elections Hammonds worth : Penguin.
10. Adhikari, Sudepta (2008), Political Geography of India, Allahabad: Sharda PustakBhandar.

## B. A. (GEOGRAPHY) 4<sup>TH</sup> YEAR, SEM-7

<b>PAPER / TITLE</b>	<b>P-18 'A' / INDUSTRIAL GEOGRAPHY</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	ELECTIVE	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	<ul style="list-style-type: none"><li>• <b>ASSIGNMENT : 10</b></li><li>• <b>PRESENTATION : 10</b></li><li>• <b>ATTENDANCE : 05</b></li></ul>	

### COURSE OBJECTIVES:

After Completion of the Course Students will be able:-

1. To understand the importance of industries in the development of the country.
2. To understand the location of industries.
3. To understand the hazards related to industries and its mitigation.

### COURSE LEARNING OUTCOMES:

On completion of this course, learners will be able to:-

1. Students will be able to assess the type of industrial Function at the national and international level.
2. Students will be able to evaluate the positive and negative impact of industrialization.

### UNIT-I

Meaning, Nature, Scope and recent development of Industrial Geography, Factor of Localization of Industries, Theories of Industrial location, Alfred Weber and Locsh.

### UNIT-II

Types of Industries, Distributional patterns of important Industries, Iron and Steel, Cotton Textiles, Chemicals and Petro – Chemicals.

### UNIT-III

Industrial Regions :Methods of delineating industrial regions., Industrialization and Globalization, Environmental degradation caused by industries.

### UNIT-IV

Industrial hazards and occupational health., Impact of Industries on economic development., Role of Globalization on Industrial Sector.

### SUGGESTED READING:

1. S. Siddartha (2000), Economic Geography, Theories, Process and Pattern, Kisolaya Pub. Ltd. Pantan.
2. Alexander, J. W. (1988), Economic Geography, Prentice Hall, Englewood Cliffs.
3. Alexanderson, C. (1967), Geography of Manufacturing, Prentice Hall Bombay.
4. Hoover, E. M. (1948), The Location and space Economy, McGraw Hill, New York.
5. Isard, W. (1956), Methods of Regional analysis, The Technology Press of MIT & John Wiley and Sons, New York.
6. Miller E. A. (1962), Geography of Manufacturing, Prentice Hall, Engle woods Cliffs.
7. Weber, Alferd (1957), Theory of Location of Industries, Chicago University Press, Chicago.

## B. A. (GEOGRAPHY) 4<sup>TH</sup> YEAR, SEM-7

<b>PAPER / TITLE</b>	<b>P-18 'B' / URBAN GEOGRAPHY</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	ELECTIVE	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	<ul style="list-style-type: none"><li>• <b>ASSIGNMENT : 10</b></li><li>• <b>PRESENTATION : 10</b></li><li>• <b>ATTENDANCE : 05</b></li></ul>	

### COURSE OBJECTIVES:

After Completion of the Course Students will be able:-

1. To understand the linkages between urban cities and the societal forces that shapes it.
2. To critically analyse contemporary urban issues from a geographical perspective.
3. To understand urban issues in order to engage with possible and effective planning and policy interventions.

### COURSE LEARNING OUTCOMES:

On completion of this course, learners will be able to:-

1. Students will be able to understand the city and its various dimensions.
2. Students will be able to identify the problems of the city and make sure that what can be the solution in its context.

### UNIT-I

Urban Geography : Meaning, Nature & Scope, Patterns of Urbanization in Developed and Developing Countries.

### UNIT-II

Functional Classification of Cities : Quantitative and Qualitative Methods, Urban Influences : Umland and Rural–Urban Fringe.

### UNIT-III

Study of Regional Urban Patterns; Central Place Theory of Christaller & Losch, Growth Pole Theory of Perroux, Metropolitan City and Primate City, Concept of Satellite towns.

### UNIT-IV

Contemporary Urban Issues; Urban Poverty; Housing; Slums, Master Plan : A case study of Lucknow.

### SUGGESTED READINGS:

1. Alam, S.M. (1964), Hyderabad – Secunderabad Town in Cities Asia Publishing House, Bombay.
2. Carter (1972), The Study of Urban Geography, Edward Arnold Publishers, London.
3. Dickinson, R.E.(1964), City and Region, Routledge, London.
4. Gibbs, J.P. (1961), Urban Research Methods D. Van Nostrand Co. Inc. Princeton, New Jersey.
5. Hall P (1992), Urban and Regional Planning, Routledge, London.
6. Houser, Philip M and Schnore Leo F. (ed.) (1965), The Study of Urbanization, Wiley, New York.
7. Mayer, H.M. Kohn, C.F. (eds.); Readings in Urban Geography, University of Chicago Press, Chicago.
8. Mumford, (1958), Culture of Cities, McMillan & Co., London.
9. Nangia, Sudesh (1976), Delhi Metropolitan Region: A Study in Settlement Geography, Rajesh Publication.
10. Ram Chandran, R. (1988), Urbanization and Urban System in India, New Delhi, Oxford Publication.
11. Singh, R. B.(ed.) (2000), Urban Sustainable in the context of Global Change, Oxford & IBN Pub. New Delhi.

## B. A. (GEOGRAPHY) 4<sup>TH</sup> YEAR, SEM-7

<b>PAPER / TITLE</b>	<b>P-18 'C' / CULTURAL GEOGRAPHY</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	ELECTIVE	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	<ul style="list-style-type: none"><li>• <b>ASSIGNMENT</b> : 10</li><li>• <b>PRESENTATION</b> : 10</li><li>• <b>ATTENDANCE</b> : 05</li></ul>	

### **COURSE OBJECTIVES:**

After Completion of the Course Students will be able:-

1. To understand the complexities of Human Races and its Environment.
2. To critically understand a broad range of issues that Humans face today.
3. To provide a basic social, cultural, political and economic understanding of Human Settlement.

### **COURSE LEARNING OUTCOMES:**

On completion of this course, learners will be able to:-

1. To understand the linkages between various cultural groups.
2. Critically analyse contemporary Cultural issues from a geographical perspective.
3. Understand Cultural issues in order to engage with possible and effective planning and policy interventions.

### **COURSE CONTENTS:-**

#### **UNIT-I**

The Nature, Scope, approaches in Cultural Geography. The Historical development of cultural Geography. Themes in cultural Geography - The Cultural Region. Functional, Formal. Perceptual.

#### **UNIT-II**

Environment and Culture: Culture Areas & Cultural Realms of the world and its relationship with environment, Elements of cultural expressions.

#### **UNIT-III**

Spatial structure, Focuses on similarities and differences of various cultures with respect to racial, ethnic, religious, linguistic, demographic, and organizational characteristics in Indian context.

#### **UNIT-IV**

Human races, Habitat economy and Society of tribal groups. Racial Elements in India's Population; Tribes of India (Bhil, Gond, Toda, Naga); Tribes of World (Eskimo, Pigmy, Bushman), Folk Culture its Revival, Cultural Adaptation and Environmental perception; Patterns of popular Culture and Cultural fusion.

### **SUGGESTED READING:**

1. Ahmad, A. (1999): Social Geography, Rawat Publication, New Delhi.
2. Dubey, S.C., (1991): Indian Society, National Book Trust, New Delhi.
3. Gregory, D. and Larry, U.J. (ed.), (1985): Social relations and Spatial Structures, McMillan, London.
4. Haq, M. (2004): Reflection on Human Development. Oxford University Press, New Delhi.
5. Rao, M.S.A. (1970): Urban Sociology in India. Orient Longman, Delhi.
6. Rao, S. (1958): Personality of India: Pre and Proto Historic Foundation of India and Pakistan, M.S. University, Baroda, Vadodara.
7. Schwartzberg J. (1978): An Historical Atlas of South Asia. University of Chicago Press, Chicago.
8. Sen, A. and Dreze J. (1996): Indian Development: Selected Regional

## B. A. (GEOGRAPHY) 4<sup>TH</sup> YEAR, SEM-8

<b>PAPER / TITLE</b>	<b>P-19 / RESEARCH METHODOLOGY</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04	<b>Theory</b>	<b>75</b>
<b>CORE / ELECTIVE</b>	CORE	<b>Internal Assessment</b>	<b>25</b>
<b>THEORY / PRACTICAL</b>	THEORY	<ul style="list-style-type: none"><li>• <b>ASSIGNMENT : 10</b></li><li>• <b>PRESENTATION : 10</b></li><li>• <b>ATTENDANCE : 05</b></li></ul>	

### COURSE OBJECTIVES:

After Completion of the Course Students will be able:-

1. This course attempts to introduce the students to the basic knowledge related to geographical field research design.
2. The course examines the questions related to data collection, methods and its analysis.
3. It also critically evaluates the dissertation based on field survey.

### COURSE LEARNING OUTCOMES:

On completion of this course, learners will be able to:-

1. The students will be able to understand basic concepts of field research methods and research design in geography.
2. The students will be able to do field work through practical experience and get skills of data collection methods and processing and analysis of obtained data.
3. The students will be able to write dissertation based on field work on given topic.

### COURSE CONTENT

#### UNIT-I

Introduction to Geographical Research: Concept, Significance, Types and Approaches to Research in Geography; Literature survey; Research Ethics; Limitations. Research Design: Steps, Identification and formulation of Research Problem; Research questions; Aims and Objectives, concepts of Hypothesis, Schedule and sampling.

#### UNIT-II

Data Sources and Methods of Data Collection: Nature of Data: qualitative and quantitative, Primary Data: Field survey, Selection of sample, Questionnaire, Interview, Observation, PRA; Secondary Data.

#### UNIT-III

Data Analysis: Processing of Data; tabulation, graphic presentation and analysis of Data; Referencing; Structure of dissertation.

#### UNIT-IV

Interpretation of Data and Paper Writing – Layout of a Research Paper, Journals in Computer Science, Impact factor of Journals, When and where to publish ? Ethical issues related to publishing, Plagiarism and Self-Plagiarism.

### SUGGESTED READINGS:

1. Black, James A. and Champion, D.J. 1976. Methods and Issues in Social Research, John Wiley and Sons, New York.
2. Bonnett, Alastair, R. 2008. What Is Geography? Sage, London.
3. Creswell, J. W. 2009. Research Design: Qualitative, Quantitative and Mixed Methods Approaches, Sage, California, USA.
4. Gopal, Krishan and Singh, Nina, 2016. Researching Geography: The Indian Context. Routledge, Delhi.
5. Harris, C. 2001. Archival Fieldwork, Geographical Review, 91 (1-2), 328-334
6. Hart, C. 1999. Doing Literature Review: Releasing the Social Science Research Imagination, Sage, London.

## B. A. (GEOGRAPHY) 4<sup>TH</sup> YEAR, SEM-8

<b>PAPER / TITLE</b>	<b>P-20 / TERM PAPER</b>	<b>TOTAL MARKS</b>	<b>100</b>
<b>CREDITS</b>	04		
<b>CORE / ELECTIVE</b>	CORE		

### **COURSE OBJECTIVES:**

After Completion of the Course Students will be able:-

1. The Students will be taught how to write a Term Paper.

### **COURSE LEARNING OUTCOMES:**

On completion of this course, learners will be able to:-

1. The Student will learn to write a Term Paper after duly following all the steps in research Methods, which are taught in the course entitled Research Methodology in Geography.

### **COURSE CONTENT**

1. The term paper should include followings:

- a. Title of the project
- b. Introduction
- c. Review of Literature
- d. Study Area
- e. Data sources
- f. Main Objective
- g. Materials and methods
- h. Results & Discussion
- i. Conclusion
- j. Photos
- k. References

### **SUGGESTED READINGS:**

1. Archer J. E. & Dalton T.H. (1968) : The fields work in Geography, E. T. Batsford Ltd., London.
2. Haring, Lloyed (1975) : Scientific Geographic Research W. C. Brow Company USA.
3. Johnes, P.A. (2008) : Field work in Geography, Longman.
4. Kothari C. R. (1996) : Research Methods, Vishwas Prakashan, New Delhi.
5. Misra R. P. (1991) : Research Methodology in Geography, Concept Publication, New Delhi.

## B. A. (GEOGRAPHY) 4<sup>TH</sup> YEAR, SEM-8

<b>PAPER / TITLE</b>	<b>MAJOR RESEARCH PROJECT / DISSERTATION</b>	<b>TOTAL MARKS</b>	<b>300</b>
<b>CREDITS</b>	12		
<b>CORE / ELECTIVE</b>	CORE		

### COURSE OBJECTIVES:

After Completion of the Course Students will be able:-

1. The Students will be taught how to write a Major Research Project / Dissertation.

### COURSE LEARNING OUTCOMES:

On completion of this course, learners will be able to:-

1. The Student will learn to write a Major Research Project / Dissertation, after duly following all the steps in research Methods, which are taught in the course entitled Research Methodology in Geography.

### COURSE CONTENT-

1. The students of B.A. Geography Semester-8 may have to be selected a specific theme / topic for a Major Research Project. The students may select some of the following themes for their project.

- Land Evaluation
- Land-use / Land cover Analysis
- Water sources
- Slope Studies
- Climatic Change
- Settlement Studies
- Agriculture Studies
- Health studies
- Infrastructure Studies
- Vegetation Studies

2. GIS, GPS & RS methods have to be used with appropriate primary and secondary data.
3. The students should follow the research guidelines by reading Research Methodology before taking up the Project work.
4. The project should no cross 50 pages including photos, references and tables.
5. Project work must include quality maps, diagrams and flowcharts.
6. The Major Research Project / Dissertation should include followings:
  - Title of the project
  - Introduction
  - Review of Literature
  - Study Area
  - Data sources
  - Main Objective
  - Materials and methods
  - Results & Discussion
  - Conclusion
  - Photos
  - References

### SUGGESTED READINGS:

1. Archer J. E. & Dalton T.H. (1968) : The fields work in Geography, E. T. Batsford Ltd., London.
2. Haring, Lloyed (1975) : Scientific Geographic Research W. C. Brow Company USA.
3. Johnes, P.A. (2008) : Field work in Geography, Longman.
4. Kothari C. R. (1996) : Research Methods, Vishwas Prakashan, New Delhi.
5. Misra R. P. (1991) : Research Methodology in Geography, Concept Publication, New Delhi.