



## **Department of Geography**

### **Scheme of Examination and Syllabus for Under Graduate Programme**

**Under Multiple Entry and Exit, Internship and  
CBCS-LOCF as per NEP-2020  
w.e.f. session 2024-25 (in phased manner)**

### **Subject: Geography**



**Guru Jambheshwar University of Science  
& Technology Hisar-125001, Haryana  
(A+ NAAC Accredited State Govt. University)**



**Guru Jambheshwar University of Science and Technology**  
**Hisar-125001, Haryana**  
**(‘A+’ NAAC Accredited State Govt. University)**



Scheme of Examination & Syllabus for affiliated Degree Colleges for UG Programme  
According to National Education Policy-2020

**Subject: Geography**

**FIRST YEAR**

<b>SEMESTER-I</b>								
Type of Course	Course Code	Nomenclature of Paper/Course	Credits	Contact Hours	Internal Marks	External Marks	Total Marks	Duration of Exam (Hrs)
Discipline Specific Course	C24GEO101T	Geography of India	3	3	20	50	70	2.5
	C24GEO101P	Geography of India Lab	1	2	10	20	30	2
Discipline Specific Course #	C24GEO102T	<b>Population Geography</b>	<b>3</b>	<b>3</b>	<b>20</b>	<b>50</b>	<b>70</b>	<b>2.5</b>
	C24GEO102P	<b>Population Geography Lab</b>	<b>1</b>	<b>2</b>	<b>10</b>	<b>20</b>	<b>30</b>	<b>2</b>
Minor Course/ Vocational Course	C24MIC109T	General Geography of India	2	2	15	35	50	2
Minor Course/ Vocational Course #	C24MIN109T	<b>Resource Geography</b>	<b>3</b>	<b>3</b>	<b>20</b>	<b>50</b>	<b>70</b>	<b>2.5</b>
	C24MIN109P	<b>Resource Geography Lab</b>	<b>1</b>	<b>2</b>	<b>10</b>	<b>20</b>	<b>30</b>	<b>2</b>
Multi-disciplinary Course	C24MDC114T	General Geography	3	3	25	50	75	2.5
Skill Enhancement Course	C24SEC109T	Surveying Techniques	2	2	15	35	50	2
	C24SEC109P	Surveying Techniques Lab	1	2	10	15	25	2
<b>SEMESTER-II</b>								
Type of Course	Course Code	Nomenclature of Paper/Course	Credits	Contact Hours	Internal Marks	External Marks	Total Marks	Duration of Exam (Hrs)
Discipline Specific Course	C24GEO201T	Human Geography	3	3	20	50	70	2.5
	C24GEO201P	Human Geography Lab	1	2	10	20	30	2
Discipline Specific Course #	C24GEO202T	<b>Agricultural Geography</b>	<b>3</b>	<b>3</b>	<b>20</b>	<b>50</b>	<b>70</b>	<b>2.5</b>
	C24GEO202P	<b>Agricultural Geography Lab</b>	<b>1</b>	<b>2</b>	<b>10</b>	<b>20</b>	<b>30</b>	<b>2</b>
Minor Course/ Vocational Course	C24MIC209T	Geography of Haryana	2	2	15	35	50	2
Minor Course/ Vocational Course #	C24MIN209T	<b>Geography of Haryana</b>	<b>4</b>	<b>4</b>	<b>30</b>	<b>70</b>	<b>100</b>	<b>3</b>
Multi-disciplinary Course	C24MDC214T	Physical Geography of India	3	3	25	50	75	2.5
Skill Enhancement Course	C24SEC209T	Interpretation of Maps and Toposheets	2	2	15	35	50	2
	C24SEC209P	Interpretation of Maps and Toposheets Lab	1	2	10	15	25	2

#For Scheme C only

**Program Outcomes (PO)**

<b>PO1</b>	Knowledge	Capable of demonstrating comprehensive disciplinary knowledge gained during course of study
<b>PO2</b>	Communication	Ability to communicate effectively on general and scientific topics with the scientific community and with society at large
<b>PO3</b>	Problem Solving	Capability of applying knowledge to solve scientific and other problems
<b>PO4</b>	Investigation of Problems	Ability of critical thinking, analytical reasoning and research- based knowledge including design of experiments, analysis and interpretation of data to provide conclusions
<b>PO5</b>	Modern Tool usage	Ability to use and learn techniques, skills and modern tools for scientific practices
<b>PO6</b>	Life-Long Learning	Aptitude to apply knowledge and skills that are necessary for participating in learning activities throughout life

**Geography**  
**Geography of India (Semester I)**  
**Discipline Specific Course (DSC)**

**Course Code: C24GEO101T**  
**45 Hrs. (3 Hrs./Week)**  
**Credit : 3**  
**Exam Time: 2.5 Hrs.**

**External Marks : 50**  
**Internal Marks : 20**  
**Total Marks: 70**

**Note:** The maximum time duration for attempting the paper will be of 2.5 hours. The examiner is required to set seven questions in all. The first question will be compulsory consisting of five short questions covering the entire syllabus consisting of 2.5 marks each. In addition to that six more questions will be set, two questions from each unit. The student shall be required to attempt four questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks i.e. 12.5 marks.

**Objective:** To introduce the students with Physical, Natural, Demographic, Economic and Developmental elements of India.

**Unit-I** **15 Hrs**

Physiology of India: Location, relief, and drainage system.  
Climate, soils, natural vegetation, and natural disasters in India.

**Unit-II** **15 Hrs**

Population: distribution, density, growth and composition.  
Green Revolution in India; Production and Distribution of crops: Rice, Wheat, Cotton and Sugarcane.  
Energy resources: coal, petroleum, hydroelectricity, solar, and nuclear energy.

**Unit-III** **15 Hrs**

Mineral resources: iron ore, manganese, aluminum, and mica.  
Industrial regions of India and Industries- iron and steel, cotton textile, sugar.  
Transport and communication, Modes of transport: Road, Railway, Water

**Geography of India Lab**

**Course Code: C24GEO101P**  
**30 Hrs (2 Hrs/week)**  
**Credit: 1**  
**Time: 2 Hrs**

**External Marks: 20**  
**Internal Marks: 10**  
**Total Marks: 30**

**Practical Record: A project file of at least 10 exercises on the below mentioned themes:**

1. Drawing of Isoleths (Isotherms and Isobars) on map of India. (2 Exercise)
2. Representation of population distribution (Dot Method) and density (Choropleth) on map of India. (2 Exercise)
3. Representation of age and sex structure. (Pyramid diagram 1 Exercise)
4. Representation of rainfall deviation in India at least for 20 years. (1 exercise)
5. Representation of production (Graphical) and distribution (Map) of crops, mineral and energy resources. (any 2 Exercise)
6. Mapping of modes of transport in India. (any 2 Exercise)

**Recommended Books:**

1. Deshpande C. D. (1992) India: A Regional Interpretation, ICSSR, New Delhi.
2. Hussain M. (1992) Geography of India, Tata McGraw Hill Education
3. Johnson, B. L. C., ed. (2001) Geographical Dictionary of India. Vision Books, New Delhi.
4. Mamoria C. B. (1980) Economic and Commercial Geography of India, Shiva Lal Agarwala.
5. Mandal R. B. (ed.), (1990) Patterns of Regional Geography – An International Perspective. Vol. 3 – Indian Perspective.
6. Sdyasuk Galina and P Sengupta (1967) Economic Regionalisation of India, Census of India
7. Sharma, T. C. (2003) India - Economic and Commercial Geography. Vikas Publ., New Delhi.
8. Sharma, T.C. (2013) Economic Geography of India. Rawat Publication, Jaipur
9. Tirtha, Ranjit (2002) Geography of India, Rawat Publs., Jaipur & New Delhi.

### Course outcomes

At the end of the course, the students would be able to:

- CO1 Understand the physiography of India.
- CO2 Enable to understand the natural and physical components of India.
- CO3 Conceptualization and understanding of demographic situation of India.
- CO4 Context of Green Revolution and its impact on major crops of India.
- CO5 Provide awareness about the resources, industries and transportation in India.
- CO6 Enable students to Represent different geographical data with the help of graphical and map tools.

### Mapping of CO with PO

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	S	S	M	S
CO2	S	S	S	M	M	S
CO3	M	M	M	M	M	S
CO4	S	M	S	S	M	M
CO5	M	M	M	M	W	S
CO6	S	S	M	M	M	S

S= strong    M= medium    W= weak

**Geography**  
**Population Geography (Semester I)**  
**Discipline Specific Course (DSC)**

**Course Code: C24GEO102T**  
**45 Hrs. (3 Hrs./Week)**  
**Credit : 3**  
**Exam Time: 2.5 Hrs.**

**External Marks : 50**  
**Internal Marks : 20**  
**Total Marks: 70**

**Note:** The maximum time duration for attempting the paper will be of 2.5 hours. The examiner is required to set nine questions in all. The first question will be compulsory consisting of five short questions covering the entire syllabus consisting of 2 marks each. In addition to that eight more questions will be set, two questions from each unit. The students shall be required to attempt five questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks i.e. 10 marks.

**Objectives:** This course introduces the spatial distribution of population with causative factors. It also deals with various theories and concepts related with population. Study of population is an essential component in planning of various human related issues.

**UNIT-I**

**12 Hrs**

Nature and Scope of Population Geography, Population Geography and Demography, Sources of Population Data, Problems of mapping population data  
World Population: Distribution and Density, Age and Sex composition, occupational Structure and Literacy.

**UNIT-II**

**13 Hrs**

Population Change: Growth; Fertility and Mortality. Demographic Transition. Theories of Population Growth: Malthus and Karl Marx.  
Migration: Meaning, Types, Causes and Consequences. Theories/ Models of Migration; Ravenstein & Lee, Gravity Model, Model of least effort and Lewis's Model

**UNIT-III**

**10 Hrs**

Population Policies: Population Policies in Developed (U.S.A. and Japan) and Developing (India and China) Countries.  
Problem of Gender Inequality and Women Empowerments.

**UNIT-IV**

**10 Hrs**

Human Resources: Role of Human resources in environment and Economic Developments.  
Human Development: Quality of Life Index (PQLI) and Human Development Index (HDI), Position of human development in different states of India

**Population Geography Lab**

**Course Code: C24GEO102P**  
**30 Hrs (2 Hrs/Week)**  
**Credit: 1**  
**Time: 2 Hours**

**Marks for External: 20**  
**Marks for Internal: 10**  
**Total Marks: 30**

**Practical Record: A project file of at least 09 exercises on the below mentioned themes:**

1. Distribution of population - 1 Exercise (Dot method)
2. Population Density and Literacy Rate- 2 Exercises (Choropleth Methods)
3. Age and sex Composition - 1 Exercise (Pyramid)
4. Dominance of population by Sex and Religion- 2 Exercises (Snail diagram)
5. Trends of Population in Developed and Under Developed countries -1 Exercise (Trend graph)
6. Representation of occupation wise population among Under Developed, Developing, Developed and Highly Developed countries - 2 Exercise (Pie diagram)

**Suggested Readings:**

1. Bhende, A. A. and Kanitkar, T. (2011): Principles of Population Studies, Himalaya Publishing House, Mumbai.
2. Cassen, Robert & Bates, Lisa M. (1994): Population Policy: A New Consensus Overseas Development Council, Washington, D.C.
3. Chandna, R. C. (2016): Population Geography: Concepts, Determinants and Patterns, Kalyani Publishers, New Delhi.
4. Demko, G. J. and others (Eds.) (1971): Population Geography, Reader, McGraw- Hill Books Co., New York

5. Graff, M., and Bremner, J. (2014): A Practical Guide to Population and Development, Washington DC: Population Reference Bureau.
6. Hassan, I. (2020) Population Geography: A Systematic Exposition, Routledge, London.
7. May, J.F. (2012) World population policies: their origin, evolution, and impact, Washington DC: Springer.
8. Mahajan, N (2014) Population Geography, R.K. publishers, Delhi.
9. Murray C. J. L., J. A. Salomon, C. D. Mathers and A. D. Lopez (), Summary Measures of Population Health: Concepts, Ethics, Measurement and Applications. WHO, Geneva.
10. Newbold, K Bruce (2016) Population geography: Tools and Issues.
11. Qazi, S.A (2010). Population Geography, APH publishers.

**Course outcomes:**

At the end of the course, the students would be able to:

- CO1 get knowledge about population data base, methodological issues and mapping.
- CO2 familiarize with the dynamics of population and demographic dividends.
- CO3 have enrichment of knowledge about population theories and models.
- CO4 Awareness about population policies of different countries and relation between population and environment.

**Mapping of CO with PO**

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	M	S	S	M	S
CO2	S	S	S	M	M	S
CO3	M	M	M	M	M	S
CO4	S	M	S	S	M	M

S= strong

M= medium

W= weak

**Geography**  
**General Geography of India (Semester I)**  
**Minor Course (MIC)**

**Course Code: C24MIC109T**  
**30 Hrs. (2 Hrs./Week)**  
**Credit : 2**  
**Exam Time: 2 Hrs.**

**External Marks : 35**  
**Internal Marks : 15**  
**Total Marks: 50**

**Note:** The maximum time duration for attempting the paper will be of 2 hours. The examiner is required to set five questions in all. The first question will be compulsory consisting of five short questions covering the entire syllabus consisting of 3 marks each. In addition to that four more questions will be set, two questions from each unit. The students shall be required to attempt three questions in all selecting one question from each unit consisting of 10 marks each in addition to compulsory Question No. 1.

**Objective:** To introduce the students with Physical, Natural, Demographic, Economic and Developmental elements of India.

**Unit-I**

**15 Hrs**

1. India: Origin, Size, Location and Boundaries.
2. Physical landscape of India.
3. Drainage system and climate.
4. Soil and natural vegetation.

**Unit-II**

**15 Hrs**

5. Population of India: Distribution, Density, Growth, Age and Sex Composition
6. Urbanization in India Industrial regions of India and Industries- iron and steel, cotton textile, sugar.

**Recommended Books:**

1. Sdyasuk Galina and P Sengupta (1967) Economic Regionalization of India, Census of India
2. Hussain M. (1992): Geography of India, Tata McGraw Hill Education.
3. Mamoria C. B. (1980): Economic and Commercial Geography of India, Shiva Lal Agarwal Publisher
4. Nag P. and Sengupta S. (1992), Geography of India, Concept Publishing.
5. Pichamuthu C. S. (1967), Physical Geography of India, National Book Trust.
6. Sharma T. C. and Coutinho O (1997), Economic and Commercial Geography of India, Vikas Publishing.
7. Singh Gopal (1976) A Geography of India, Atma Ram & Sons. Publication
8. Spate O. H. K. and Learmonth A. T. A., 1967: India and Pakistan: A General and Regional Geography, Methuen.
9. Rana, Tejbir Singh (2015) Diversity of India, R.K. Books, Delhi.
10. Khullar, D.R. (2006), India: A Comprehensive Geography, Kalyani Publication

**Course Outcomes**

At the end of the course, the students would be able to:

- CO1. Understand the location, geographical expansion and physiography of India
- CO2. Attain the knowledge of the drainage system and climate of India.
- CO3. Study the socio-cultural attributes of Indian population
- CO4. Internalize the concept of unity in diversity of our country.

**Mapping of CO with PO**

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	M	M	M	S
CO2	S	S	M	M	M	S
CO3	M	M	M	M	M	M
CO4	S	S	M	M	M	S

S= strong      M= medium      W= weak



**Geography**  
**Resource Geography (Semester I)**  
**Minor Course (MIC)**

**Course Code: C24MIN109T**  
**45 Hrs. (3 Hrs./Week)**  
**Credit : 3**  
**Exam Time: 2.5 Hrs.**

**External Marks : 50**  
**Internal Marks : 20**  
**Total Marks: 70**

**Note:** The maximum time duration for attempting the paper will be of 2.5 hours. The examiner is required to set nine questions in all. The first question will be compulsory consisting of five short questions covering the entire syllabus consisting of 2 marks each. In addition to that eight more questions will be set, two questions from each unit. The students shall be required to attempt five questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks i.e. 10 marks.

**Objectives:** This course introduces the spatial distribution of resources with causative factors. It also deals with various concepts related with resources and resource distribution. Study of resource is an essential component in planning of various human related issues

**Unit-I**

**15 Hrs**

Definition, Nature, Scope and importance of resource geography.

Classification of resources - renewable and non-renewable, biotic and abiotic resources; Resources and environment interfaces.

**Unit-II**

**15 Hrs**

Distribution, Utilisation, Problems and Management of Land Resources, Water Resources, Forests and Energy Resources.

Models of natural resources process: Zimmermann primitive and Kirk's decision.

**Unit-III**

**15 Hrs**

Concepts of Population – Resource Relationship; Optimum Population, Over Population, Under Population and Population-Resource Regions of the world.

Human resource: Distribution and density; Population explosion, Population pressure and Resources utilization, Food security.

**Unit-IV**

**15 Hrs**

Policies and problems of natural resource in Developing Countries (India and China) and Developed Countries (Japan and U.S.A)

Conservation of natural resources and Sustainable Resource Development

**Resource Geography Lab**

**Course Code: C24MIN109P**  
**30 Hrs (2 Hrs/Week)**  
**Credit: 1**  
**Time: 2 Hours**

**Marks for External: 20**  
**Marks for Internal: 10**  
**Total Marks: 30**

**Practical Record: A project file consisting of 8 exercises on the below mentioned themes:**

1. Toposheets interpretation- Forest cover, Water bodies and Settlements. **(2 Exercises)**
2. Cartogram: Production of resource/ resources in India **(1 Exercise)**
3. Trend Diagram: Representation of production data of heavy industries in India **(1 Exercise)**
4. Chorochromatic or Colour method: World resource region according to Ackerman **(1 Exercise)**
5. Chorochromatic or Colour method. Distribution of resources in India **(2 Exercises)**
6. Choropleth method: Representation of Human Development Index in India using **(1 Exercise)**

**Recommended Books/E-resources/LMS:**

1. Sharma, J.P. (2016) Prayogik Bhugol, Rastogi Publications, Meerut.
2. Singh, R.L (2005) Elements of Practical Geography. Kalyani Publishers, New Delhi. India.
3. Singh, G (2005) Map work and practical geography. Vikas Publishing House Pvt. Ltd., New Delhi
4. Dent, B.D. (1999) Cartography: Thematic Map Design, (Vol. 1), McGraw Hill.
5. Gupta, K.K. and Tyagi, V.C (1992) Working with Maps, Survey of India, DST, New Delhi.
6. Monkhouse, F.J and Wilkinson, H.R (1971) Maps and Diagrams. Methuen and Co. Ltd., London

**Course outcomes**

At the end of the course, the students would be able to:

CO1. Understand the geographical distribution of Resources

CO2. Attain the knowledge of the concepts of resources

CO3. Study the policies and problems of developing and developed countries of resource distribution

CO4. Internalize the resource distribution in India

**Mapping of CO with PO**

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	M	M	M	S
CO2	S	S	M	M	M	S
CO3	M	M	M	M	M	M
CO4	S	S	M	M	M	S

S= strong

M= medium

W= weak

**Geography**  
**General Geography (Semester I)**  
**Multi-Disciplinary Course (MDC)**

**Course Code: C24MDC114T**  
**45 Hrs (3 Hrs/Week)**  
**Credit : 3**  
**Exam Time: 2.5 Hrs**

**External Marks : 50**  
**Internal Marks : 25**  
**Total Marks: 75**

**Note:** The maximum time duration for attempting the paper will be of 2.5 hours. The examiner is required to set seven questions in all. The first question will be compulsory consisting of five short questions covering the entire syllabus consisting of 2.5 marks each. In addition to that six more questions will be set, two questions from each unit. The students shall be required to attempt four questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks i.e. 12.5 marks.

**Objective:** To introduce the students with Solar system, Physical, Natural elements of India.

**Unit-I** **15 Hrs**

Geography: Meaning and definition, branches; relation of geography with other disciplines.  
 Solar system, Origin of earth, Interior of Earth  
 Basic concepts of Earth Movement: Rotation and revolution; Formation of days, nights and seasons.  
 Latitudes & longitudes and Time Zone of the World

**Unit-II** **15 Hrs**

Weathering: definitions and classification; Types of rocks: Igneous, Sedimentary and Metamorphic.  
 Endogenic movement: Earthquake and Volcan

**Unit-III** **15 Hrs**

Composition and structure of atmosphere, temperature and Atmospheric Pressure.  
 Winds systems, precipitation and Cyclones

**Recommended Books:**

1. Barry, R.G. and Chorley, R.J. (1998) Atmosphere and Climate, Routledge, London.
2. Critchfield, H. (2002) General Climatology, Prentice-Hall of India Pvt. Ltd., New Delhi.
3. Hussain, Majid (2006) World Geography, Rawat Publishers, New Delhi.
4. Pounds and Taylor (1974) World Geography, South Western Publishing Company, Ohio.
5. Sharma, H.S. (1980) Perspectives in Geomorphology, Concepts, New Delhi.
6. Singh, S. (2006) Physical Geography, Pravalika Publications, Allahabad.
7. Sparks, B.W. (1960) Geomorphology, Longman, London.
8. Trewartha, G.T. (1981) an Introduction to Climate, Mc-Graw Hill, New York.
9. Singh L. R. (2016) Fundamentals of Practical Geography, Sharda Pustak Bhawan, Allahabad.
10. Sarkar, A. (2015) Practical geography: A systematic approach, Orient Black Swan Private Ltd., New Delhi.
11. Robinson, A.H., et. al. (1995) Elements of Cartography, John Wiley, New York.
12. Sharma, J.P. (2016) Prayogik Bhugol, Rastogi Publications, Meerut.

**Course Outcomes**

At the end of the course, the students would be able to:

CO1. Attain a systematic knowledge of geography.

CO2. Acquire a comprehensive knowledge about earth and its major phenomena.

CO3. Understand the geographical concepts which are relevant in day- to-day life.

**Mapping of CO with PO**

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	M	M	M	S
CO2	S	S	M	M	M	S
CO3	M	M	M	M	M	M

S= strong      M= medium      W= weak

**Geography**  
**Surveying Techniques (Semester I)**  
**Skill Enhancement Course (SEC)**

**Course Code: C24SEC109T**  
**30 Hrs. (2 Hrs./Week)**  
**Credit : 2**  
**Exam Time: 2 Hrs.**

**External Marks : 35**  
**Internal Marks : 15**  
**Total Marks: 50**

**Note:** The maximum time duration for attempting the paper will be of 2 hours. The examiner is required to set five questions in all. The first question will be compulsory consisting of five short questions covering the entire syllabus consisting of 3 marks each. In addition to that four more questions will be set, two questions from each unit. The students shall be required to attempt three questions in all selecting one question from each unit consisting of 10 marks each in addition to compulsory Question No. 1.

**Objectives:** To introduce the students with Different types of Survey techniques and importance of Survey in Geography.

**Unit –I** **15 Hrs**

Definition and importance of survey; method of surveying; primary division of survey; classification of survey.  
Types of survey based on instruments and method.  
Chain and tape survey: instruments, method and importance of chain and tape survey.

**Unit- II** **15 Hrs**

Plane table survey: instruments, types of plane table survey and importance of plane table survey.  
Prismatic compass survey: instruments, method and importance of prismatic compass survey.  
Contemporary relevance of Surveying Techniques in Geography.

**Surveying Techniques Lab**

**Course Code: C24SEC109P**  
**30 Hrs (2 Hrs/Week)**  
**Credit: 1**  
**Time: 2 Hours**

**Marks for External: 15**  
**Marks for Internal: 10**  
**Total Marks: 25**

A project file consisting of 8 exercises on the below mentioned themes:

1. Chain and tape survey: Traverse Method (2 exercises).
2. Plane table survey: Radiation Method, Intersection Method and Traverse Method (3 exercises).
3. Prismatic compass survey: Radiation Method, Intersection Method and Traverse Method (3 exercises).

**Recommended Books:**

1. Misra, R.P. and Ramesh, A. 1999. Fundamentals of Cartography, Concept Publishing Company, New Delhi
2. Monkhouse, F.J. and Wilkinson, H.R. 1980. Maps and Diagrams. B. I. Publications, New Delhi.
3. Singh, R.L (2005) Elements of Practical Geography. Kalyani Publishers, New Delhi. India.
4. Sharma, J.P. (2016) Prayogik Bhugol, Rastogi Publications, Meerut.
5. Sarkar, A. (2015) Practical geography: A systematic approach, Orient Black Swan Private Ltd., New Delhi.
6. Robinson, A.H., et. al. (1995) Elements of Cartography, John Wiley, New York.
7. Dent, B.D. (1999) Cartography: Thematic Map Design, (Vol. 1), McGraw Hill.
8. Gupta, K.K. and Tyagi, V.C (1992) Working with Maps, Survey of India, DST, New Delhi.
9. Singh, G (2005) Map work and practical geography. Vikas Publishing House Pvt. Ltd., New Delhi
10. Misra, R.P. and Ramesh, A. 1999. Fundamentals of Cartography, Concept Publishing Company, New Delhi
11. Monkhouse, F.J. and Wilkinson, H.R. 1980. Maps and Diagrams. B. I. Publications, New Delhi.
12. Singh, R.L (2005) Elements of Practical Geography. Kalyani Publishers, New Delhi. India.

**Course outcomes**

At the end of the course, the students would be able to:

- CO1 Understand Different types of Survey techniques.  
CO2 Enable to understand methods of survey techniques.

**Mapping of CO with PO**

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	S	S	S
CO2	S	S	S	M	S	S

S= strong      M= medium      W= weak

**Geography**  
**Human Geography (Semester II)**  
**Discipline Specific Course (DSC)**

**Course Code: C24GEO201T**  
**45 Hrs. (3 Hrs./Week)**  
**Credit : 3**  
**Exam Time: 2.5 Hrs.**

**External Marks : 50**  
**Internal Marks : 20**  
**Total Marks: 70**

**Note:** The maximum time duration for attempting the paper will be of 2.5 hours. The examiner is required to set seven questions in all. The first question will be compulsory consisting of five short questions covering the entire syllabus consisting of 2.5 marks each. In addition to that six more questions will be set, two questions from each unit. The students shall be required to attempt four questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks i.e. 12.5 marks.

**Objectives:** To introduce the students with Concepts of Human-environment relationships, Population distribution and settlements.

**Unit –I** **15 Hrs**

Introduction: Definition, nature and scope of human geography; Historical perspective of human geography.  
Approaches to study human geography and contemporary relevance of human geography.

**Unit- II** **15 Hrs**

Concept of Human-environment relationship: A historical approach, Human adaptation to the environment (i) Eskimo (ii) Bushman (iii) Gujjar Bakarwals of Himalaya.  
Space and society: cultural regions; race; tribes  
Population: population growth and distribution; population composition; Malthusian theory of population growth

**Unit –III** **15 Hrs**

Population-resource relationships: population-resource regions.  
Settlements: types of rural settlements; functional classification of urban settlements; trends and patterns of world urbanization.  
Population pressure and resource use, environment and concept of sustainable development

**Human Geography Lab**

**Course Code: C24GEO201P**  
**30 Hrs (2 Hrs/Week)**  
**Credit: 1**  
**Time: 2 Hours**

**Marks for External: 20**  
**Marks for Internal: 10**  
**Total Marks: 30**

**Practical Record:**

A project file consisting of 8 exercises on the below mentioned themes: -

1. Chart of major branches of Human Geography (1 exercise)
2. Chart of classification of resources (1 exercise)
3. Composition of major religions and language of the world (2 exercises).
4. Flow diagram of migration streams of world population (1 exercise).
5. Plotting of isodapane (2 exercises).
6. Spatial and temporal growth of world population (2 exercises).

**Recommended Books:**

1. Agarwal, A et al (1999) The Citizen's Fifth Citizen's Report, Centre for Science & Environment, New Delhi.
2. Alexander, John. W. (1988) Economic Geography, Prentice Hall of India Ltd., New Delhi.
3. Bergwan, Edward E. (1985) Human Geography: Culture Connections and Landscape, Prentice-Hall, New Jersey.
4. Carr, M. Patterns (1987) Process and Change in Human Geography, McMillan Education, London.
5. Carter, H. (1972) The study of Urban Geography, Edward Arnold, London.
6. Chandna, R.C. (2016) A Geography of Population: Concepts, Determinants and Patterns, Kalyani Publishers, New Delhi.
7. DeBlij, H. J. (1996) Human Geography, Culture, Society and Space, John Wiley, New York.
8. Fellman, J. L. (1997) Human Geography-Landscapes of Human Activities, Brown and Benchmark Pub., USA.
9. Hassan, I. (2020) Population Geography: A Systematic Exposition, Routledge, London.
10. Hussain, M. (2018) Human Geography, Rawat, Publication, Jaipur.
11. McBride, P.J. (1996): Human Geography; Systems Patterns and Change, Nelson, UK and Canada.
12. Michael, C. (1996) New Patterns: Process and Change in Human Geography, Nelson.
13. Qazi, S.A. (2010) Population Geography, APH publishers.
14. Ramachandra, R. (1992) Urbanization and Urban System in India, Oxford, London.
15. Sharma, Y.K. (2017). Human Geography, Narain publishers.
16. Singh, N. (2015) A Text Book of Human Geography, Rajesh Publishing. International and Transnational Perspectives on Urban Systems. Tokyo, Japan: Springer pages 393

**Course outcomes**

At the end of the course, the students would be able to:

CO1. Gain knowledge about the fundamentals of human geography.

CO2. Enhance the knowledge of race and religion.

CO3 understand the organization of space.

CO4. Familiarize with world economic systems.

**Mapping of CO with PO**

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	M	M	S
CO2	S	S	M	M	M	S
CO3	S	S	M	M	M	S
CO4	M	M	M	M	M	M

S= strong

M= medium

W= weak

**Geography**  
**Agricultural Geography (Semester II)**  
**Discipline Specific Course (DSC-B2)**

**Course Code: C24GEO202T**  
**45 Hrs. (3 Hrs./Week)**  
**Credit : 3**  
**Exam Time: 2.5 Hrs.**

**External Marks : 50**  
**Internal Marks : 20**  
**Total Marks: 70**

**Note:** The maximum time duration for attempting the paper will be of 2.5 hours. The examiner is required to set nine questions in all. The first question will be compulsory consisting of five short questions covering the entire syllabus consisting of 2 marks each. In addition to that eight more questions will be set, two questions from each unit. The students shall be required to attempt five questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks i.e. 10 marks.

**Objectives:** This course introduces the spatial distribution of population with causative factors. It also deals with various theories and concepts related with population. Study of population is an essential component in planning of various human related issues.

<b>UNIT-I</b>	<b>10 Hrs</b>
Agricultural Geography: Nature, scope and significance of agricultural geography. Determinants of agricultural patterns: physical, Non-physical	
<b>UNIT-II</b>	<b>12 Hrs</b>
Models in Agricultural Geography: Von Thunen model of agricultural land use and diffusion model. Agricultural Regionalisation: Concept and criteria, combination, concentration and diversification.	
<b>UNIT-III</b>	<b>11 Hrs</b>
Whittlesey's agricultural regions; agricultural regions of India. Agricultural Productivity: Concept, methods of its measurement; regional imbalances in agricultural productivity in India.	
<b>UNIT-IV</b>	<b>11 Hrs</b>
Agricultural problems and future strategies for agricultural developments (New green revolution, organic farming). New Perspectives in Agriculture: agri-business; food security, Sustainable Agricultural Development.	

**Agricultural Geography Lab**

**Course Code: C24GEO202P**  
**30 Hrs (2 Hrs/Week)**  
**Credit: 1**  
**Time: 2 Hours**

**Marks for External: 20**  
**Marks for Internal: 10**  
**Total Marks: 30**

A project file consisting of 8 exercises on the below mentioned themes:

1. Chart of determinants of agricultural cropping pattern (1 exercise).
2. Land use diagram of von Thunen model (1 exercise).
3. Composition of major crops of the India (1 exercises).
4. Soil distribution map of the India (1 exercises).
5. Plotting of isohyets and isotherms (2 exercises).
6. Major agricultural region of India and world (2 exercises).

**Recommended Readings:**

1. Atkin's, P., and Bowler, L., 2001: Food in Society - Economy, Culture and Geography, Oxford University Press, Oxford.
2. Basu, D.N., and Guha, G.S., 1996: Agro-Climtic Regional Planning in India, Vol.I& II, Concept Publication, New Delhi.
3. Buller, N. and Hoggart, K., (eds.) 2001: Agricultural Transformation, Food and Environment, Vol. I, Ashgate Publishing Company, Burlington.
4. Burch, D., Gross, J. and Lawrence, G. (eds.), 1999: Restructuring Global and Regional Agriculture, Ashgate Publishing Company, Burlington.
5. Burger, A., 1994: Agriculture of the World, Aldershot, Avebury.

6. Bryant, C.R., Johnston, T.R, 1992: Agriculture in the City Countryside, Belhaven Press, London.
7. Grigg, D.B., 1984: Introduction to Agricultural Geography, Hutchinson, London
8. Grossmn, D., VanDen Berg, L.M., and Ajaegbu, H., 1999: Urban and Peri-Urban Agriculture in Africa, Ashgate, Publishing Company, Brookfield.
9. Ilbery, B.W., (ed.) 1998: Geography of Rural Change, Addison Wesley Longman, London.
10. Mohammad, N., 1992: New Dimension in Agriculture Geography, Vol. I to VIII, Concept Pub., New Delhi.
11. Obosu-Mensah, K., 1999: Food Production in Urban Areas: A Study of Urban Agriculture in Accra, Ghana, Ashgate publishing Co., Brookfield.

**Course outcomes:**

*At the end of the course, the students would be able to:*

- CO1 Enrich the knowledge about origin, location and distribution of agricultural activities.
- CO2 Enhance the knowledge about changing land use and cropping pattern.
- CO3 Acquaint with agricultural systems, efficiency and productivity.
- CO4 Aware about impacts of climate change and economic liberalization on agriculture

**Mapping of CO with PO**

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	M	M	S
CO2	S	S	S	M	M	S
CO3	S	S	S	M	M	S
CO4	M	M	M	M	M	M

S= strong      M= medium      W= weak



**Geography**  
**Geography of Haryana (Semester II)**  
**Minor Course (MIC)**

**Course Code: C24MIC209T**  
**30 Hrs. (2 Hrs./Week)**  
**Credit : 2**  
**Exam Time: 2 Hrs.**

**External Marks : 35**  
**Internal Marks : 15**  
**Total Marks: 50**

**Note:** The maximum time duration for attempting the paper will be of 2 hours. The examiner is required to set five questions in all. The first question will be compulsory consisting of five short questions covering the entire syllabus consisting of 3 marks each. In addition to that four more questions will be set, two questions from each unit. The students shall be required to attempt three questions in all selecting one question from each unit consisting of 10 marks each in addition to compulsory Question No. 1.

**Objective:** To introduce the students with Physical, Natural, Demographic, Economic and Developmental elements of Haryana.

**Unit-I** **15 Hrs**

Haryana; size, location, boundaries, relief and Drainage  
 Climate; Distribution Rainfall & Temperature, Monsoon and Climatic Region of Haryana Drainage system and climate.  
 Haryana; Types of Soil; their Characteristics and Distribution  
 Haryana; Types of natural vegetation; their Distribution and Forest Resources.

**Unit-II** **15 Hrs**

Population: distribution, density and growth and Rural-Urban Population.  
 Migration and Urbanization in Haryana  
 Haryana; Major Crops and Green Revolution  
 Haryana; Transport and Trade

**Recommended Books:**

1. Census of India (1981) Regional Division in Haryana.
2. Census of India (2001) Administrative Atlas of Haryana.
3. Deshpande CD (1992) India: A Regional Interpretation, ICSSR and Northern Book
4. Singh, Jasbir (1976) Agricultural Geography of Haryana, Vishal Publishers, Kurukshetra.
5. FICCI (2007) State of Infrastructure in Haryana
6. Singh, R.L. (1971) India-A Regional Geography, National Geographical Society, Varanasi

**Course Outcomes**

At the end of the course, the students would be able to:

- CO1. Understand the physiography and climate of Haryana.
- CO2. Have knowledge of agriculture and industrial status of the state.
- CO3. Familiarize with population distribution and literacy of the state.
- CO4. Attain the knowledge of trade and transport of Haryana.

**Mapping of CO with PO**

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	M	M	S
CO2	S	S	S	M	M	S
CO3	S	S	M	M	M	S
CO4	M	M	M	M	M	S

S= strong    M= medium    W= weak

**Geography**  
**Geography of Haryana (Semester II)**  
**Minor Course (MIC)**

**Course Code: C24MIN209T**  
**60 Hrs. (4 Hrs./Week)**  
**Credit : 4**  
**Exam Time: 3 Hrs.**

**External Marks : 70**  
**Internal Marks : 30**  
**Total Marks: 100**

**Note:** The maximum time duration for attempting the paper will be of 3 hours. The examiner is required to set nine questions in all. The first question will be compulsory consisting of seven short questions covering the entire syllabus consisting of 2 marks each. In addition to that eight more questions will be set, two questions from each unit. The students shall be required to attempt five questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks.

**Objective:** To introduce the students with Physical, Natural, Demographic, Economic and Developmental elements of Haryana.

**Unit-I** **15 Hrs**

Haryana; size, location, boundaries, relief and Drainage  
 Climate; Distribution Rainfall & Temperature, Monsoon and Climatic Region of Haryana Drainage system and climate.

**Unit-II** **15 Hrs**

Haryana; Types of Soil; their Characteristics and Distribution  
 Haryana; Types of natural vegetation; their Distribution and Forest Resources.

**Unit-III** **15 Hrs**

Population: distribution, density, growth, and Rural-Urban Population.  
 Migration and Urbanization in Haryana

**Unit-IV** **15 Hrs**

Haryana; Major Crops and Green Revolution  
 Haryana; Transport and Trade.

**Recommended Books:**

1. Census of India (1981) Regional Division in Haryana.
2. Census of India (2001) Administrative Atlas of Haryana.
3. Deshpande CD (1992) India: A Regional Interpretation, ICSSR and Northern Book
4. Singh, Jasbir (1976) Agricultural Geography of Haryana, Vishal Publishers, Kurukshetra.
5. FICCI (2007) State of Infrastructure in Haryana
6. Singh, R.L. (1971) India-A Regional Geography, National Geographical Society, Varanasi

**Course outcomes**

At the end of the course, the students would be able to:

- CO1 Understand the physiography and climate of Haryana.
- CO2 Have knowledge of agriculture and industrial status of the state.
- CO3 Familiarize with population distribution and literacy of the state.
- CO4 Attain the knowledge of trade and transport of Haryana.

**Mapping of CO with PO**

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	M	S	W	M	W	S
CO2	S	W	S	M	M	W
CO3	S	S	S	S	S	S
CO4	M	W	M	S	M	M

S= strong M= medium W= weak

**Geography**  
**Physical Geography of India (Semester II)**  
**Multi-Disciplinary Course (MDC)**

**Course Code: C24MDC214T**  
**45 Hrs (3 Hrs/Week)**  
**Credit : 3**  
**Exam Time: 2.5 Hrs**

**External Marks : 50**  
**Internal Marks : 25**  
**Total Marks: 75**

**Note:** The maximum time duration for attempting the paper will be of 2.5 hours. The examiner is required to set seven questions in all. The first question will be compulsory consisting of five short questions covering the entire syllabus consisting of 2.5 marks each. In addition to that six more questions will be set, two questions from each unit. The students shall be required to attempt four questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks i.e. 12.5 marks.

**Objective:** To introduce the students with Physical, Natural elements of India.

**Unit-I**

**15 Hrs**

Geological history, Physical Landscape structure and Divisions of India.  
 The Morphological Regions of India.

Drainage system and their Functional Signification.

**Unit-II**

**15 Hrs**

Climate: Regional and Seasonal Variation in Rainfall and Temperature; Factors effecting of Indian Climate.  
 Theories of Monsoon origin and Climatic Region of India.

**Unit-III**

**15 Hrs**

Natural vegetation: classification, distribution and their Significance

Soils: classification, distribution and their characteristics

**Recommended Books:**

1. Deshpande, C.D. (1992) India-A Regional Interpretation, Northern Book Depot, NewDelhi.
2. Hussain Majid (2015) Geography of India, Mc Graw Hill Education.
3. Shafi, M. (2000) Geography of South Asia, McMillan and Company, Calcutta.
4. Singh, Gopal (2006) Geography of India, Atma Ram and Sons, New Delhi.
5. Singh, R.L. (1971) India: A Regional Geography, National Geographical Society,India, Varanasi.
6. Sharma, J.P. (2016) Prayogik Bhugol, Rastogi Publications, Meerut.
7. Mishra R.P. and Ramesh, A., 1989: Fundamentals of Cartography, Concept, NewDelhi.
8. Monkhouse F. J. and Wilkinson H. R., 1973: Maps and Diagrams, Methuen, London.
9. Singh R. L. and Singh R. P. B., 1999: Elements of Practical Geography, KalyaniPublishers.
10. Sarkar, A. (2015) Practical geography: A systematic approach. Orient Black Swan Private Ltd., New Delhi

**Course outcomes**

At the end of the course, the students would be able to:

- CO1 Understand the geological and physiographic Structure of India.
- CO2 Enrich skills about drainage system and various Hydrological regimes.
- CO3 Understand the climate and its characteristics.
- CO4 Acquire knowledge about different types of flora andsoils found in India.
- CO5 Attain skills in solving various practical problems associated with physical aspects of India.

**Mapping of CO with PO**

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	M	M	M	M	M	S
CO2	M	M	M	M	M	M
CO3	S	S	S	S	M	S
CO4	M	M	M	M	M	M
CO5	S	S	S	S	M	S

S= strong    M= medium    W= weak

**Geography**  
**Interpretation of Maps and Toposheets (Semester I)**  
**Skill Enhancement Course (SEC)**

**Course Code: C24SEC209T**  
**30 Hrs. (2 Hrs./Week)**  
**Credit : 2**  
**Exam Time: 2 Hrs.**

**External Marks : 35**  
**Internal Marks : 15**  
**Total Marks: 50**

**Note:** The maximum time duration for attempting the paper will be of 2 hours. The examiner is required to set five questions in all. The first question will be compulsory consisting of five short questions covering the entire syllabus consisting of 3 marks each. In addition to that four more questions will be set, two questions from each unit. The students shall be required to attempt three questions in all selecting one question from each unit consisting of 10 marks each in addition to compulsory Question No. 1.

**Objectives:** To introduce the students with Maps and its distribution Toposheets and its classification.

**Unit –I** **15 Hrs**

Maps; History, Meaning, Definition and Basic concepts of Maps, Techniques of Map- making, Reduction and Enlargement of Maps, Classification and uses of Map.  
 Distribution Maps; Meaning, Definition and Classification. Techniques of thematic mapping: Chorochromatic, Choroschematic, Choropleth, Isopleth, Dot method and Diagrammatic Methods.

**Unit –II** **15 Hrs**

Toposheet Maps; History, Meaning and Classification, Toposheets maps of India and neighborhood countries. Basic information on Topographical sheets, Preliminary information, Conventional Signs, Interpretation of Relief, Drainage, Settlements, Land-use, Vegetation and Transport network on toposheets. Uses of Toposheets in various field

**Interpretation of Maps and Toposheets Lab**

**Course Code: C24SEC209P**  
**30 Hrs (2 Hrs/Week)**  
**Credit: 1**  
**Time: 2 Hrs**

**External Marks: 15**  
**Internal Marks : 10**  
**Total Marks: 25**

A project file consisting of 10 exercises on the below mentioned themes:

1. Reduction and Enlargement of Maps. (2 Exercises)
2. Distribution maps; Choropleth Method (1 Exercise)
3. Distribution maps; Dot Method (1 Exercise)
4. Distribution maps; Isopleth Method (1 Exercise)
5. Distribution maps; Diagrammatic Methods (1 Exercise)
6. Conventional Signs and symbols on Toposheets (1 Exercise)
7. Contours line and drainage pattern on Toposheets (1 Exercise)
8. Land Uses on Toposheets (2 Exercises)

**Recommended Books/E-resources/LMS:**

1. Singh L. R. (2016) Fundamentals of Practical Geography, Sharda Pusta Bhawan, Allahabad.
2. Singh, L.R and Singh, R (1973) Map work and practical geography, Central Book Allahabad
3. Singh, R.L (2005) Elements of Practical Geography. Kalyani Publishers, New Delhi. India.
4. Sharma, J.P. (2016) Prayogik Bhugol, Rastogi Publications, Meerut.
5. Sarkar, A. (2015) Practical geography: A systematic approach, Orient Black Swan Private Ltd., New Delhi.
6. Robinson, A.H., et. al. (1995) Elements of Cartography, John Wiley, New York.
7. Dent, B.D. (1999) Cartography: Thematic Map Design, (Vol. 1), McGraw Hill.
8. Gupta, K.K. and Tyagi, V.C (1992) Working with Maps, Survey of India, DST, New Delhi.
9. Singh, G (2005) Map work and practical geography. Vikas Publishing House Pvt. Ltd., New Delhi

**Course outcomes**

At the end of the course, the students would be able to:

- CO1. Understand the Maps distribution and Toposheets.
- CO2. Enable to understand different components of Maps and Toposheets.

**Mapping of CO with PO**

	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	M	S	S
CO2	S	S	S	M	S	S

S= strong    M= medium    W= weak