INDEX

DEPARTMENT OF GEOGRAPHY
SEMESTER – II

Sl. No.	Content	Page No.
1	**B.A. (Hons.) Geography** DISCIPLINE SPECIFIC CORE (DSC) (1) Geomorphology (2) Population Geography (3) Statistical methods in Geography	**02-06**
2	**B.A (Prog.) with Geography as Major** DISCIPLINE SPECIFIC CORE (DSC) (1) Geomorphology (2) Population Geography	**07-09**
3	**BA (Prog.) with Geography as Non-Major** DISCIPLINE SPECIFIC CORE (DSC) (1) Human Geography	**10-11**
4	**POOL OF GENERIC ELECTIVES** (1) Globalization and Mobility (2) Disaster Management (3) Indigenous knowledge and Practices	**12-16**

DISCIPLINE SPECIFIC CORE COURSE – 4 (DSC-4): GEOMORPHOLOGY

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
GEOMORPHOLOGY	4	3	1	-	-	-

Learning Objectives

The Learning Objectives of this course are as follows:

- To understand the association between geomorphologic landforms, concepts and processes.
- To critically evaluate and connect information about geomorphic processes.
- To provide a theoretical and empirical framework for understanding landscape evolution and the characteristics of individual types of geomorphic landscapes.

Learning outcomes

The Learning Outcomes of this course are as follows:

- To know the functioning of earth systems in real time and analyze how the natural and anthropogenic operating factors affects the development of landforms.
- To distinguish between the mechanisms that controls these processes.
- To assess the roles of structure, stage and time in shaping the landforms, interpret geomorphological maps and apply the knowledge in geographical research.

SYLLABUS OF DSC-4

UNIT – I (2Weeks)
Geomorphology: Definitions, Principles, Recent Trends

UNIT – II (4Weeks)
Plate Tectonics: Concept, Mechanism, Boundaries, Movements and Resultant effects

UNIT – III (3Weeks)
Denudation: Weathering, Mass Wasting, Erosion

UNIT – IV (3Weeks)
Landform development: Cyclic (ideas of Davis and Penck), non-cyclic and poly-cyclic concepts

UNIT – V (5 Weeks)
Landforms: Fluvial, Aeolian, Glacial, and Coastal Landforms

Practical component (if any) - NIL

Suggestive readings

1. Bloom, A.L., (2003). Geomorphology: A Systematic Analysis of Late Cenozoic Landforms. First Indian Reprint. Delhi: Pearson Education (Singapore) Pte. Ltd.
2. Dyal., P. (2014). Bho-Akriti Vigyan. Rajesh Publications, New Delhi (Hindi).
3. Gupta, S.L. (2008). Bho-Akriti Vigyan. University of Delhi (Hindi).
4. Jat., B.C. (2004). Bho-Akriti Vigyan. Rawat Publications, New Delhi, (Hindi).
5. Singh, S. (1998). Geomorphology. PrayagPuskak Bhawan: Allahabad.
6. Strahler, A.H. and Strahler, A.N. (1992). Modern Physical Geography, Fourth Edition. John Wiley & Sons, Canada.
7. Summerfield, M.A, (1991). Global Geomorphology: an Introduction to the Study of Landforms. Longman, New York.
8. Tarbuck, E.J., Lutgens, F.K and Tasa, D. (2012). Earth Science, Thirteenth Edition, Prentice Hall. Delhi.
9. Thornbury, W.D., (1993). Principles of Geomorphology, Second Edition. Wiley Eastern Limited, New Delhi.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

DISCIPLINE SPECIFIC CORE COURSE – 5 (DSC-5): POPULATION GEOGRAPHY

Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
POPULATION GEOGRAPHY	4	3	1	-	-	-

Learning Objectives

The Learning Objectives of this course are as follows:

- It introduces the basic concepts of population geography to the students.
- An understanding of the importance and need of Demographic data.
- Spatial understanding of population dynamics.

Learning outcomes

The Learning Outcomes of this course are as follows:

- The students would get an understanding of the distribution and trends of population growth in the developed and less developed countries, along with population theories.
- The students would get an understanding of the dynamics of the population.

- An Understanding of the implications of population composition in different regions of the world.

SYLLABUS OF DSC-5

UNIT – I (3 Weeks)

Nature and Scope of Population Geography, Sources of Population Data with special reference of Indian Census.

UNIT – II (4Weeks)

Population Size, Distribution and Growth – Determinants and Patterns; Theories of Growth – Malthusian Theory and Demographic Transition Theory.

UNIT – III (4Weeks)

Population Dynamics: Fertility and Mortality – Measures and Determinants, Migration – Determinants and Implications.

UNIT – IV (4Weeks)

Dynamics of Population Pyramids and Women Empowerment and Indian Population Policies.

UNIT – V (2 Weeks)

Contemporary Issues - Ageing of Population, Demographic Dividends, Global Refugee Crisis.

Practical component (if any) - NIL

Suggestive readings

1. Bhende A. and Kanitkar T. (2019). Principles of Population Studies. Himalaya Publishing House, New Delhi, India.
2. Chandna, R.C. (2017). Geography of Population. Kalyani Publishers, Ludhiana, India.
3. Clarks, John, I. (1972). Population Geography. Pergamon Press, New York.
4. Hassan M.I. (2020). Population Geography, A Systematic Exposition. Routledge Taylor and Francis Group, New York.
5. Lutz, W., Warren, C. S. and Scherbov, S. (2004). The End of the World Population Growth in the 21st Century. UK: Earthscan.
6. Majumdar, P.K. (2010). Fundamentals of Demography. Rawat publications, Jaipur.
7. Maurya, S. D. (2021). *JansankyaBhugol*. Sharda Pustak Bhawan, Allahabad.
8. Newbold, K. B. (2017). Population Geography: Tools and Issues. Rowman and Littlefield Publishers,NY, USA.
9. Saroha, J. (2021). JansankhyaBhugol, JanankikievamJansankhyaAdhayan. M.K. Books, New Delhi.
10. Weeks, John R. (2020) Population: An Introduction to Concepts and Issues. Cengage Learning, Boston.

DISCIPLINE SPECIFIC CORE COURSE – 6 (DSC-6): STATISTICAL METHODS IN GEOGRAPHY

Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course(if any)
		Lecture	Tutorial	Practical/ Practice		
STATISTICAL METHODS IN GEOGRAPHY (PRACTICAL)	4	-	-	8		

Learning Objectives

The Learning Objectives of this course are as follows:

- The concept of quantitative information in general and Geographical data in particular. The importance of data analytics. The ways data is collected, or data is taken from different sources. The sampling methods' application for data collection purposes.
- To understand the ways to handle the collected data through classification, tabulation and stigmatization.
- To compute relations and impacts among the data series.

Learning outcomes

The Learning Outcomes of this course are as follows:

- To differentiate between qualitative and quantitative information.
- To know the nature of various data, different sources and methods of data collection.
- To present data through graphical and diagrammatic formats.
- To analyse the variations in spatial and non-spatial data.

SYLLABUS OF DSC-6

UNIT – I (3 Weeks)

Data in Geography: Sources of Data, Scales of Measurements in Geography, Tabulation, Frequency Distribution, Geographical Data Matrix.

UNIT – II (5 Weeks)

Descriptive Statistics: Central Tendencies – Mean, Median, Mode; Measures of Partitions - Quartile, Decile, Percentile; Measures of Dispersion- Standard Deviation and Coefficient of Variation; Spatial Centro-graphic Techniques – Mean Centre, Median Centre.

UNIT – III (3 Weeks)

Sampling Methods: Sampling (Simple Random, Systematic, and Stratified); and Non-probability sampling.

UNIT – IV (3 Weeks)

Theoretical Distribution: Concept of Probability Distribution (Theoretical only), Normal Distribution – Characteristics, Area under Normal Curve.

UNIT – V (3 Weeks)

Relationship Analysis: Correlation - Spearman's and Karl Pearson's coefficient of correlation; Simple Regression.

Practical component (if any) – Practical File*

Suggestive readings

1. Alvi Z. (1995). Statistical Geography: Methods and Applications. RawatPublications, Jaipur.
2. Mahmood A. (1999). Statistical Methods in Geographical Studies. Rajesh Publications, New Delhi.
3. Pal S. K. (1998). Statistics for Geoscientists. Tata McGraw Hill, New Delhi.
4. Rogerson P.A. (2014). Statistical Methods for Geography: A Student's Guide. Sage, New Delhi.
5. Singh D. (2018). प्रारंभिकसांख्यिकीविधियाँ. New Delhi. R K Books, New Delhi.
6. Ebdon D. (1977). Statistics in Geography: A Practical Approach. Oxford, UK. Blackwell.
7. Singh D. (2018). Elementary Statistical Methods. R K Books, New Delhi.
8. Sinha, I. (2007). सांख्यिकीभूगोल. Discovery Publishing House, New Delhi.
9. Walford N. (2011). Practical Statistics for Geographers and Earth Scientists. Wiley-Blackwell, West Sussex, United Kingdom.
10. SPSS (Statistical Package for Social Sciences)
11. Tableau Desktop software/R.

Note:

***1. Students should construct/collect data matrix (75X5) with each row 75 representing an aerial unit (district/village/town) and 5 columns of relevant attributes of areal units.**

2. All the exercises will be based on the data matrix collected by the students.

3. Simple calculator is allowed in the examination.

Category II

Geography Courses for Undergraduate Programme of study with Geography as one of the Core Disciplines

(B.A. Programmes with Geography as Major discipline)

DISCIPLINE SPECIFIC CORE COURSE – 3 (DSC-3): GEOMORPHOLOGY

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
GEOMORPHOLOGY	4	3	1	-	-	-

Learning Objectives

The Learning Objectives of this course are as follows:

- To understand the association between geomorphologic landforms, concepts and processes.
- To critically evaluate and connect information about geomorphic processes.
- To provide a theoretical and empirical framework for understanding landscape evolution and the characteristics of individual types of geomorphic landscapes.

Learning outcomes

The Learning Outcomes of this course are as follows:

- To understand the functioning of earth systems in real time and analyze how the natural and anthropogenic operating factors affects the development of landforms.
- To distinguish between the mechanisms that controls these processes.
- To assess the roles of structure, stage and time in shaping the landforms, interpret geomorphological maps and apply the knowledge in geographical research.

SYLLABUS OF DSC-3

UNIT – I (2 Weeks)
Geomorphology: Definitions, Principles, Recent Trends

UNIT – II (4 Weeks)
Plate Tectonics: Concept, Mechanism, Boundaries, Movements and Resultant effects

UNIT – III (3 Weeks)
Denudation: Weathering, Mass Wasting, Erosion

UNIT – IV (3 Weeks)

Landform development: Cyclic (ideas of Davis and Penck), non-cyclic and poly-cyclic concepts

UNIT – V (5 Weeks)

Landforms: Fluvial, Aeolian, Glacial, and Coastal Landforms

Practical component (if any) - NIL

Suggestive readings

1. Bloom, A.L., (2003). Geomorphology: A Systematic Analysis of Late Cenozoic Landforms. First Indian Reprint. Delhi: Pearson Education (Singapore) Pte. Ltd.
2. Dyal., P. (2014). Bho-Akriti Vigyan. Rajesh Publications, New Delhi (Hindi).
3. Gupta, S.L. (2008). Bho-Akriti Vigyan. University of Delhi (Hindi).
4. Jat., B.C. (2004). Bho-Akriti Vigyan. Rawat Publications, New Delhi, (Hindi).
5. Singh, S. (1998). Geomorphology. PrayagPuskak Bhawan: Allahabad.
6. Strahler, A.H. and Strahler, A.N. (1992). Modern Physical Geography, Fourth Edition. John Wiley & Sons, Canada.
7. Summerfield, M.A, (1991). Global Geomorphology: an Introduction to the Study of Landforms. Longman, New York.
8. Tarbuck, E.J., Lutgens, F.K and Tasa, D. (2012). Earth Science, Thirteenth Edition, Prentice Hall. Delhi.
9. Thornbury, W.D., (1993). Principles of Geomorphology, Second Edition. Wiley Eastern Limited, New Delhi.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

DISCIPLINE SPECIFIC CORE COURSE – 4 (DSC-4): POPULATION GEOGRAPHY

Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
POPULATION GEOGRAPHY	4	3	1	-	-	-

Learning Objectives

The Learning Objectives of this course are as follows:

- It introduces the basic concepts of population geography to the students.
- An understanding of the importance and need for Demographic data.
- Spatial understanding of population dynamics.

Learning outcomes

The Learning Outcomes of this course are as follows:

- The students would get an understanding of the distribution and trends of population growth in the developed and less developed countries, along with population theories.
- The students would get an understanding of the dynamics of the population.
- An Understanding of the implications of population composition in different regions of the world.

SYLLABUS OF DSC-4

UNIT – I (3 Weeks)
Nature and Scope of Population Geography, Sources of Population Data with special reference of Indian Census.

UNIT – II (4 Weeks)
Population Size, Distribution and Growth – Determinants and Patterns; Theories of Growth – Malthusian Theory and Demographic Transition Theory.

UNIT – III (4 Weeks)
Population Dynamics: Fertility and Mortality – Measures and Determinants, Migration – Determinants and Implications.

UNIT – IV (4 Weeks)
Dynamics of Population Pyramids and Women Empowerment and Indian Population Policies.

UNIT – V (2 Weeks)
Contemporary Issues - Ageing of Population, Demographic Dividends, Global Refugee Crisis.

Practical component (if any) - NIL

Suggestive readings
1. Bhende A. and Kanitkar T. (2019). Principles of Population Studies. Himalaya Publishing House, New Delhi, India.
2. Chandna, R.C. (2017). Geography of Population. Kalyani Publishers, Ludhiana, India.
3. Clarks, John, I. (1972). Population Geography. Pergamon Press, New York.
4. Hassan M.I. (2020). Population Geography, A Systematic Exposition. Routledge Taylor and Francis Group, New York.
5. Lutz, W., Warren, C. S. and Scherbov, S. (2004). The End of the World Population Growth in the 21st Century. UK: Earthscan.
6. Majumdar, P.K. (2010). Fundamentals of Demography. Rawat publications, Jaipur.
7. Maurya, S. D. (2021). *JansankyaBhugol*. Sharda Pustak Bhawan, Allahabad.
8. Newbold, K. B. (2017). Population Geography: Tools and Issues. Rowman and Littlefield Publishers,NY, USA.
9. Saroha, J. (2021). JansankhyaBhugol, JanankikievamJansankhyaAdhayan. M.K. Books, New Delhi.
10. Weeks, John R. (2020) Population: An Introduction to Concepts and Issues. Cengage Learning, Boston.

Category III

Geography Courses for Undergraduate Programme of study with Geography as one of the Core Disciplines

(B.A. Programmes with Geography as non-Major or Minor discipline)

DISCIPLINE SPECIFIC CORE COURSE – 2 (DSC-2): HUMAN GEOGRAPHY

Credit distribution, Eligibility and Prerequisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
HUMAN GEOGRAPHY	4	3	1	-	-	-

Learning Objectives

The Learning Objectives of this course are as follows:

- To understand various dimensions of human geography and cultural landscape.
- To analyses the population growth and distribution.
- To understand the relationship between population and resource.

Learning outcomes

The Learning Outcomes of this course are as follows:

- Detailed exposure to contemporary relevance of cultural landscape.
- In-depth knowledge of space and the society of cultural regions.
- Understanding the settlement pattern and population resource relationship.

SYLLABUS OF DSC- 2

UNIT – I (2 Weeks)

Human Geography: Definition, Scope and Major Themes; Contemporary Relevance, Understanding Cultural Landscape.

UNIT – II (4 Weeks)

Population: World Population Growth – Trends and Patterns, Population Composition (Residence, Literacy and Age).

UNIT – III (4 Weeks)

Space and Society: Cultural Regions, Tribes, Religion and Language.

UNIT – IV (4 Weeks)

Settlements: Types of Rural Settlements; Classification of Urban Settlements; Trends and Patterns of World Urbanization.

UNIT – V (3 Weeks)

Human Development – Measurements (HDI and IHDI), Regional Variations and Sustainable Development Goals.

Practical component (if any) - NIL

Suggestive readings

1. Chandna, R.C. (2017). Geography of Population. Kalyani Publishers, Ludhiana, India.
2. Hassan M.I. (2020). Population Geography-A Systematic Exposition. Routledge Taylor and Francis Group, New York.
3. Human Development Reports of United Nations Development Program.
4. Hussain Majid (2021). Human Geography. Rawat Publication.
5. Majid, Hussain (2012). Manav Bhugol. Rawat Publication.
6. Maurya, S.D. (2012). Manav Bhugol. Sharda Pustak Bhawan, Allahabad, India.
7. Patra, P. et. al.(2021). Perspectives of Human Geography. Concept Publications, New Delhi.
8. Rubenstein, J.M. (2008). An Introduction to Human Geography: The Cultural Landscape. Pearson Prentice Hall, NJ.
9. Saroha, J. (2021). JansankhyaBhugol, JanankikievamJansankhyaAdhayan. M.K. Books, New Delhi.
10. Singh, S and Saroha, J. (2021). Human and Economic Geography. Pearson Publication.

COMMON POOL OF GENERIC ELECTIVES (GE) COURSES OFFERED BY THE DEPARTMENT OF GEOGRAPHY

GENERIC ELECTIVES (GE-4): GLOBALIZATION AND MOBILITY

Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course	Department offering the course
		Lecture	Tutorial	Practical/ Practice			
GLOBALIZATION AND MOBILITY	4	3	1	-	-	-	GEOGRAPHY

Learning Objectives

The Learning Objectives of this course are as follows:

- To understand the concept of mobility and migration.
- To understand the global cities, global village and borderless world.
- To understand flexible labour market and mass mobility.

Learning outcomes

The Learning Outcomes of this course are as follows:

- The students will able to learn the concept of migration.
- Students will able to differentiate between mobility and migration.
- Students will able to learn the implications of flexible labour market.

SYLLABUS OF GE-4

UNIT – I (2 Weeks)
Globalization: Concept and Indicators; Mobility and Migration: Concept and Significance.

UNIT – II (4 Weeks)
Global Cities, Global Village and Borderless World: Intensification and integration of Economic and Political Relations across borders.

UNIT – III (4 Weeks)
Role of freedom of Trade and Information Technology on Human Mobility. Challenges of Globalization.

UNIT – IV (4 Weeks)
Mobility: Frequency, Trends, Patterns and Factors; Pressure on Social Infrastructure.

UNIT – V (3 Weeks)

Globality: Implications of Flexible Labour Market, Individual and Mass Mobility.

Practical component (if any) - NIL

Suggestive readings

1. Acharya, L.M. (2012). Economic Geography, Migration and Global Politics. KUNAI Books.
2. Ahmad, Aijazuddin (2002). Social Geography. Rawat Books, Jaipur.
3. Jone, V and Pertierra (2013). Migration, Diaspora and Information technology in Global Societies. Routledge Publication.
4. Kent, Bruce (1991). Building the Global Village. Hopper Collins Publishers Inc.
5. Marshall, Tim (2021). The Power of Geography: Ten Maps That Reveal The Future of Our World. Elliott & Thompson limited.
6. Rajgopalan, S (2012). Rural Urban Migration: Trends, Challenges and Strategies. SBS Publishers.
7. Sengupta, Anita (2015). Globalizing Geographies. KW Publishers Pvt. Ltd.
8. Shrinivasan, Ramesh (2017). Whose Global Village? Rethinking How Technology Shapes Our World. NYU Press.
9. Shroff, Menon (2019). Social Changes in Migration Globalization. Amiga Press Inc.

GENERIC ELECTIVES (GE-5): DISASTER MANAGEMENT

Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course	Department offering the course
		Lecture	Tutorial	Practical/ Practice			
DISASTER MANAGEMENT	4	3	1	-	-	-	GEOGRAPHY

Learning Objectives

The Learning Objectives of this course are as follows:

- Understanding the basic concepts of disaster management.
- Detailed analysis about the different types of disasters in India.
- Evaluating the role of institutional frameworks to mitigate the disasters in the country.

Learning outcomes

The Learning Outcomes of this course are as follows:

- In depth understanding about the various disasters in the country.
- It will provide thorough understanding about the human responses to the disasters.
- It will highlight the responses and mitigation measures to both natural and manmade disasters.

SYLLABUS OF GE-5

UNIT – I (4 Weeks)

Disasters, Hazards, Risk, Vulnerability- Definition, Concept and Classification;Hazard, Risk Vulnerability Capacity (HRVC) - Methods, Analysis and Mapping

UNIT – II (3 Weeks)

Disaster Management- Disaster Management Cycle, Community Based Disaster Management

UNIT – III (3 Weeks)

Floods, Earthquake, Drought, Cyclone

UNIT – IV (3 Weeks)

Industrial,War, Fire, Epidemics, Nuclear

UNIT – V (4 Weeks)

Strategies for disaster management: International- Yokohama Strategy for a Safer World 1994, Hyogo framework for Action 2005-2015; Sendei Framework for Disaster Risk Reduction 2015-2030; Indian Policyfor disaster management: Disaster Management Act 2005,10 point Agenda of Prime minister on DRR

Practical component (if any) - NIL

Suggestive readings

1. Asthana , N.C. and Asthana P. (2014). Disaster Management. Pointer Publishers
2. Bryant , E.(2004). Natural Hazards. Cambridge University Press, India
3. Kapur ,Anu(2010). Vulnerable India: A Geographical Study Of Disasters. Sage Publications,
4. Savinder Singh(2019). ApdaPrabandhan.PravalikaPrakashan (Hindi).
5. Smith, Keith (2013). Environmental Hazards: Assessing risk and reducing disasters
6. Wisner, B., Blaikie P et al. (2004). At Risk: Natural Hazards, People's Vulnerability and Disasters. Routledge Taylor and Francis Group , NY (https://www.preventionweb.net/files/670_72351.pdf)
7. Singh R.B. (ed.) (2006). Natural Hazards and Disaster Management: Vulnerability and Mitigation . Rawat Publications, Jaipur.
8. Singh, J. (2007). Disaster Management: Future Challenges and Opportunities.IK International Pvt. Ltd, New Delhi.
9. Sinha, A. (2001). Disaster Management: Lessons drawn and Strategies for Future. New United Press, New Delhi.
10. Modh, S. (2010). Managing Natural Disaster: Hydrological, Marine and Geological Disasters. Macmillan, Delhi.

GENERIC ELECTIVES (GE-6): INDIGENOUS KNOWLEDGE SYSTEM AND PRACTICES

Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course	Department offering the course
		Lecture	Tutorial	Practical/ Practice			
INDIGENOUS KNOWLEDGE AND PRACTICES	4	3	1	-	-	-	GEOGRAPHY

Learning Objectives

The Learning Objectives of this course are as follows:

- To know the meaning of indigenous knowledge system and its significance.
- To be aware of the concept of sustainability and ecosystem services.
- To be acquainted with about the indigenous knowledge of soil and water conservation techniques.

Learning outcomes

The Learning Outcomes of this course are as follows:

- Students will be able to know the importance of our indigenous knowledge system.
- Students will learn how indigenous knowledge system will be effective to conserve out resources.
- Students will able to know about the intellectual property rights and socio-cultural heritage.

SYLLABUS OF GE-6

UNIT – I (2 Weeks)

Introduction: Concept, Meaning and Definition, Approaches of Indigenous Knowledge System, Identification, Documentation, and Validation of Indigenous Knowledge system, Significance of Indigenous Knowledge System.

UNIT – II (4 Weeks)

Indigenous Knowledge System (IKS), Sustainability and Ecosystem Services: Indigenous Knowledge and Sustainability, Indigenous Knowledge and Ecosystem Services, Nature Based Solutions (NBSs).

UNIT – III (3 Weeks)

Indigenous Knowledge System and Practice: Case Studies: Agriculture, Land and Soil, Water, Forest.

UNIT – IV (4 Weeks)

Indigenous Knowledge System and Rights of Communities: Role of Institutions, Intellectual Property Rights (IPRs), Indigenous Knowledge System and Socio-cultural Heritage.

UNIT – V (4 Weeks)

Policy Implications/Way Forward: Revival and recognition of Indigenous Knowledge System, Integration of Intergenerational transmission of Indigenous Knowledge System, Need for Policy framework and Role of Various Initiatives with respect to India, Strength, Weakness, Opportunities and Threats (Challenges).

Practical component (if any) - NIL

Suggestive readings

1. Berkes, F. and Gadgil, M. (1995). Indigenous Knowledge for biodiversity conservation. *Ambio,* 22(2-3): 151-156.
2. Berkes, F. (1999). Sacred Ecology: Traditional Ecological Knowledge and Resource *Management.* Milton Park: Taylor & Francis.
3. Brokensha D.W., Warren D.M. and Werner, O. (1980). Indigenous Knowledge Systems and Development. Washington DC: University Press of America.
4. Brush, S. (1993). Indigenous knowledge of biological resources and intellectual property rights: The role of anthropology. *American Anthropologist,* 95 (3): 653–86.
5. Ford, J. and Martínez, D. (2000). Traditional ecological knowledge, ecosystem and environmental management. *Ecol. Application,* 10: 1249-1250.
6. Melissa, N. and Shilling, D. (2018). Traditional Ecological Knowledge: Learning from Indigenous Environmental Sustainability. Cambridge University Press.
7. Mishra, P.K. and Rai S.C. (2013). Use of Indigenous Soil and Water Conservation Practices among Farmers in Sikkim Himalaya. *Indian Journal of Traditional Knowledge*, 12(3), July, Pp. 454-464. NISCAR, CSIR, New Delhi.
8. Rai, S.C. and Mishra, P.K. (2022).Traditional Ecological Knowledge of Resource Management in Asia. Springer Nature Switzerland AG (In Press).
9. Stori F.T., Peres C.M., Turra, A. and Pressey R.L. (2019) Traditional Ecological Knowledge Supports Ecosystem-Based Management in Disturbed Coastal Marine Social-Ecological Systems. *Frontier in Marie. Science*, 6:571.
10. Warren D.M., Slikkerveer L.J. andBrokensha, D. (1995) The cultural dimension of development: Indigenous Knowledge Systems. Intermediate Technology Publications, London.