DEPARTMENT OF GEOGRAPHY

Category-I
BA (Hons.) Geography

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	0	12th Pass	NIL

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 (3 Hours)
Geomorphology: Definitions, Principles, Recent Trends

UNIT – II (9 Hours)
Plate Tectonics: Concept, Mechanism, Boundaries, Movements and Resultant effects

UNIT – III (9 Hours)
Denudation: Weathering, Mass Wasting, Erosion

UNIT – IV (10 Hours)

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

UNIT – V (14 Hours)

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	0	12th Pass	NIL

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 (5 Hours)

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

UNIT – II (10 Hours)

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

UNIT – III (10 Hours)

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

UNIT – IV (10 Hours)

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

UNIT – V (10 Hours)

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	0	0	4	12th Pass	NIL

Note: one credit of practical is equal to two hours

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 (20 Hours)

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

UNIT – II (30 Hours)

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 (20 Hours)

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

UNIT – IV (30 Hours)

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

UNIT – V (20 Hours)

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. Rawat Publications, 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.

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