

**Choice Based Credit System**  
**B.A. (GENERAL) Geography Syllabus**

Sem-ester	CORE COURSE (14)	Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement Course (SEC) (2)	Elective: Discipline Specific DSE (4)	Elective: Generic (GE) (4) (Optional)
<b>I</b>	1A. Geomorphology	(English/ Hindi/ MIL Communication)/ Environmental Science			
	2A. Other Subject 3A. Other Subject				
<b>II</b>	1B. Human Geography	(English/ MIL Communication)/ Environmental Science			
	2B. Other Subject 3B. Other Subject				
<b>III</b>	1C. Climatology		Instrumental Survey (Practical)		
	2C. Other Subject 3C. Other Subject				
<b>IV</b>	1D. Cartographic Techniques (Practical)		Research Methods (Practical)		
	2D. Other Subject 3D. Other Subject				
<b>V</b>			Other Subject	1A. Population Geography	
				2A. Other Subject 3A. Other Subject	
<b>VI</b>			Other Subject	1B. Hydrology and Oceanography	
				2B. Other Subject 3B. Other Subject	

**B.A. (GENERAL) Geography**  
**Note: Practical paper will not have tutorials.**  
**Core Courses**

**Semester I**

- 1A. Geomorphology
- 2A. Other Subject
- 3A. Other Subject

**Semester II**

- 1B. Human Geography
- 2B. Other Subject
- 3B. Other Subject

**Semester III**

- 1C. Climatology
- 2C. Other Subject
- 3C. Other Subject

**Semester IV**

- 1D. Cartographic Techniques (Practical)
- 2D. Other Subject
- 3D. Other Subject

**Skill Enhancement Course (any four)**

**Semester III**

- 1. Instrumental Survey (Practical)

**Semester IV**

- 2. Research Methods (Practical)

**Semester V**

- 3. Other Subject

**Semester VI**

- 4. Other Subject

**Elective Discipline Specific (any three)**

**Semester V**

**DSE-A**

- 1A. Population Geography
- 2A. Other Subject
- 3A. Other Subject

**Semester VI**

**DSE-B**

- 1B. Hydrology and Oceanography
- 2B. Other Subject
- 3B. Other Subject

# **B.A. (GENERAL) Geography**

## **Semester - I**

### **Core Course**

#### **1A. Geomorphology -06 Credits**

*Five questions are to be answered out of eight questions selecting at least one question from each unit.*

*Full Marks: 70*

*Time: 3 hours*

*Internal Assessment: 30 marks*

1. Geomorphology: Nature and Scope.
2. Earth: Interior Structure and Isostasy.
3. Earth Movements: Plate Tectonics, Types of Folds and Faults, Earthquakes and Volcanoes.
4. Geomorphic Processes: Weathering, Mass Wasting, Cycle of Erosion (Davis and Penck).
5. Evolution of Landforms (Erosional and Depositional): Fluvial, Karst, Aeolian, Glacial, and Coastal.

#### **Reading List**

1. Bloom A. L., 2003: *Geomorphology: A Systematic Analysis of Late Cenozoic Landforms*, Prentice-Hall of India, New Delhi.
2. Bridges E. M., 1990: *World Geomorphology*, Cambridge University Press, Cambridge.
3. Christopherson, Robert W., (2011), *Geosystems: An Introduction to Physical Geography*, 8 Ed., Macmillan Publishing Company
4. Kale V. S. and Gupta A., 2001: *Introduction to Geomorphology*, Orient Longman, Hyderabad.
5. Knighton A. D., 1984: *Fluvial Forms and Processes*, Edward Arnold Publishers, London.
6. Richards K. S., 1982: *Rivers: Form and Processes in Alluvial Channels*, Methuen, London.
7. Selby, M.J., (2005), *Earth's Changing Surface*, Indian Edition, OUP
8. Skinner, Brian J. and Stephen C. Porter (2000), *The Dynamic Earth: An Introduction to physical Geology*, 4th Edition, John Wiley and Sons
9. Thornbury W. D., 1968: *Principles of Geomorphology*, Wiley.
10. Gautam, A (2010): *Bhautik Bhugol*, Rastogi Publications, Meerut
11. Tikkaa, R N (1989): *Bhautik Bhugol ka Swaroop*, Kedarnath Ram Nath, Meerut
12. Singh, S (2009): *Bhautik Bhugol ka Swaroop*, Prayag Pustak, Allahabad
13. Tiwary, R. K.: *Bhautik Bhugol*, Rajasthan Hindi Granth Academy, Jaipur (in press)

**Semester -II**  
**Core Course**

**1B. Human Geography - 06 Credits**

*Five questions are to be answered out of eight questions selecting at least one question from each unit.*

*Full Marks: 70*

*Time: 3 hours*

*Internal Assessment: 30 marks*

1. Introduction: Defining Human Geography; Major Themes; Contemporary Relevance
2. Space and Society: Cultural Regions; Race; Religion and Language
3. Population: Population Growth and Distribution; Population Composition; Demographic Transition Theory
4. Settlements: Types of Rural Settlements; Classification of Urban Settlements; Trends and Patterns of World Urbanization
5. Population-Resource Relationship

**Reading List**

1. Chandna, R.C. (2010) Population Geography, Kalyani Publisher.
2. Hassan, M.I. (2005) Population Geography, Rawat Publications, Jaipur
3. Daniel, P.A. and Hopkinson, M.F. (1989) The Geography of Settlement, Oliver & Boyd, London.
4. Johnston R; Gregory D, Pratt G. et al. (2008) The Dictionary of Human Geography, Blackwell Publication.
5. Jordan-Bychkov et al. (2006) The Human Mosaic: A Thematic Introduction to Cultural Geography. W. H. Freeman and Company, New York.
6. Kaushik, S.D. (2010) Manav Bhugol, Rastogi Publication, Meerut.
7. Maurya, S.D. (2012) Manav Bhugol, Sharda Pustak Bhawan. Allahabad.
8. Hussain, Majid (2012) Manav Bhugol. Rawat Publications, Jaipur

**Semester - III**  
**Core Course**  
**1C. Climatology - 06 Credits**

*Five questions are to be answered out of eight questions selecting at least one question from each unit.*

*Full Marks: 70*

*Time: 3 hours*

*Internal Assessment: 30 marks*

1. Atmospheric Composition and Structure – Variation with Altitude, Latitude and Season.
2. Insolation and Temperature – Factors and Distribution, Heat Budget, Temperature Inversion.
3. Atmospheric Pressure and Winds – Planetary Winds, Forces affecting Winds, General Circulation, Jet Streams.
4. Atmospheric Moisture – Evaporation, Humidity, Condensation, Fog and Clouds, Precipitation Types, Stability and Instability; Climatic Regions (Koppen)
5. Cyclones – Tropical Cyclones, Extra Tropical Cyclones, Monsoon - Origin and Mechanism.

**Reading List**

1. Barry R. G. and Carleton A. M., 2001: *Synoptic and Dynamic Climatology*, Routledge, UK.
2. Barry R. G. and Corley R. J., 1998: *Atmosphere, Weather and Climate*, Routledge, New York.
3. Critchfield H. J., 1987: *General Climatology*, Prentice-Hall of India, New Delhi
4. Lutgens F. K., Tarbuck E. J. and Tasa D., 2009: *The Atmosphere: An Introduction to Meteorology*, Prentice-Hall, Englewood Cliffs, New Jersey.
5. Oliver J. E. and Hidore J. J., 2002: *Climatology: An Atmospheric Science*, Pearson Education, New Delhi.
6. Trewartha G. T. and Horne L. H., 1980: *An Introduction to Climate*, McGraw-Hill.
7. Gupta L S (2000): *Jalvayu Vigyan*, Hindi Madhyam Karyanvay Nidishalya, Delhi Vishwa Vidhyalaya, Delhi
8. Lal, D S (2006): *Jalvayu Vigyan*, Prayag Pustak Bhavan, Allahabad
9. Vatal, M (1986): *Bhautik Bhugol*, Central Book Depot, Allahabad
10. Singh, S (2009): *Jalvayu Vigyan*, Prayag Pustak Bhawan, Allahabad

**Semester - IV**  
**Core Course**

**1D. Cartographic Techniques (Practical) - 06 Credits**

*Four questions are to be answered selecting one from each unit.*

*FullMarks:80*

*Time: 4 hours*

*Practical Record & Viva-Voce: 20 marks*

1. Cartography – Nature and Scope.
2. Scales – Concept and application; Graphical Construction of Plain, Comparative and Diagonal Scales.
3. Map Projections – Classification, Properties and Uses; Graphical Construction of Polar Zenithal Stereographic Projection, Simple Conical Projection with One Standard Parallel and Two Standard Parallel, Bonne’s and Mercator’s Projections.
4. Topographical Map – Interpretation of a Mountain /Plateau area.
5. Profiles- Longitudinal and Cross Profiles

**Practical Record:** A Project File in pencil, comprising one exercise *each*, on scale, map projection, interpretation of topographic sheet and profiles

**Reading List**

1. Anson R. and Ormelling F. J., 1994: *International Cartographic Association: Basic Cartographic Vol.* Pregmen Press.
2. Gupta K.K. and Tyagi, V. C., 1992: *Working with Map*, Survey of India, DST, New Delhi.
3. Mishra R.P. and Ramesh, A., 1989: *Fundamentals of Cartography*, Concept, New Delhi.
4. Monkhouse F. J. and Wilkinson H. R., 1973: *Maps and Diagrams*, Methuen, London.
5. Rhind D. W. and Taylor D. R. F., (eds.), 1989: *Cartography: Past, Present and Future*, Elsevier, International Cartographic Association.
6. Robinson A. H., 2009: *Elements of Cartography*, John Wiley and Sons, New York.
7. Sharma J. P., 2010: *Prayogic Bhugol*, Rastogi Publishers, Meerut.
8. Singh R. L. and Singh R. P. B., 1999: *Elements of Practical Geography*, Kalyani Publishers.
9. Sarkar, A. (2015) *Practical geography: A systematic approach*. Orient Black Swan Private Ltd., New Delhi
10. Singh R L & Rana P B Singh(1991) *Prayogtmak Bhugol ke Mool Tatva*, Kalyani Publishers, New Delhi
11. Sharma, J P (2010) *Prayogtmak Bhugol ki Rooprekha*, Rastogi Publications, Meerut
12. Singh, R L & Dutta, P K (2012) *Prayogatmak Bhugol*, Central Book Depot, Allahabad

**Semester - III**  
**Skill Enhancement Course (SEC)**

**1. Instrumental Survey (Practical) – 02 Credits**

*Three questions are to be answered. One will be related to field work and other two of lab work.*

*Full Marks: 100 (Field Work- 40, Lab Work- 20+20= 40 and Practical Record & Viva-Voce- 20)*  
*Time: 4 hours*

1. Prismatic Compass Survey: Open and Closed Traverse
2. Plane table survey: Radiation, Intersection, Resection
3. Clinometer
4. Dumpy level
5. Practical Record & Viva -Voce

**Practical Record:** A project file consisting of 5 exercises on using any method on the basis of above mentioned instruments.

**Reading List**

1. Monkhouse F. J. and Wilkinson H. R., 1973: *Maps and Diagrams*, Methuen, London.
2. Robinson A. H., 2009: *Elements of Cartography*, John Wiley and Sons, New York.
3. Sarkar, A. (2015) *Practical geography: A systematic approach*. Orient Black Swan Private Ltd., New Delhi
4. Sharma J.P (2015) *Prayogatmak Bhugol Ki Roop Rekha*, Rastogi Publication, Meerut.
5. Singh R L & Rana P B Singh(1991) *Prayogtmak Bhugol ke Mool Tatva*, Kalyani Publishers, NewDelhi
6. Singh R. L. and Singh R. P. B., 1999: *Elements of Practical Geography*, Kalyani Publishers.
7. Singh, L R & Singh R (1977): *Manchitra or Pryogatamek Bhugol*, Central Book Depot, Allahabad
8. Singh, R L & Dutta, P K (2012) *Prayogatmak Bhugol*, Central Book Depot, Allahabad

**Semester - IV**  
**Skill Enhancement Course (SEC)**  
**2. Research Methods (Practical) – 02 Credits**

*Four questions are to be answered selecting one from each unit.*

*Full Marks: 100*

*Time: 4 hours*

1. Geographic Enquiry: Definition and Ethics; Framing Research Questions, Objectives and Hypothesis; Literature Review; Preparing Sample Questionnaire - (15)
2. Data Collection: Type and Sources of Data; Methods of Collection; Input and Editing - (15)
3. Data Analysis: Qualitative Data Analysis; Quantitative Data Analysis; Data Representation Techniques - (15)
4. Structure of a Research Report: Preliminaries; Text; References, Bibliography and Citations; Abstract - (15)
5. Preparation of socio economic survey report - (30)+ Viva-Voce - (10)

*The topic for preparation of socio economic survey will be provided by the respective Department of Geography of different Colleges.*

**Reading List**

1. Creswell J., 1994: *Research Design: Qualitative and Quantitative Approaches* Sage Publications.
2. Dikshit, R. D. 2003. *The Art and Science of Geography: Integrated Readings*. Prentice-Hall of India, New Delhi.
3. Evans M., 1988: "Participant Observation: The Researcher as Research Tool" in *Qualitative Methods in Human Geography*, eds. J. Eyles and D. Smith, Polity.
4. Misra, R.P. (2002) *Research Methodology*, Concept Publications, New Delhi.
5. Mukherjee, Neela 1993. *Participatory Rural Appraisal: Methodology and Application*. Concept Publs. Co., New Delhi.
6. Mukherjee, Neela 2002. *Participatory Learning and Action: with 100 Field Methods*. Concept Publs.Co., New Delhi
7. Robinson A., 1998: "*Thinking Straight and Writing That Way*", in *Writing Empirical Research Reports: A Basic Guide for Students of the Social and Behavioural Sciences*, eds. by F. Pryczak and R. Bruce Pryczak, Publishing: Los Angeles.
8. Special Issue on "Doing Fieldwork" *The Geographical Review* 91:1-2 (2001).
9. Stoddard R. H., 1982: *Field Techniques and Research Methods in Geography*, Kendall/Hunt.
11. Wolcott, H. 1995. *The Art of Fieldwork*. Alta Mira Press, Walnut Creek, CA.
12. Yadav, H. (2013) *Shodh Pravidhi Evam Matratamak Bhugol*, Raja Publications, Delhi



## Semester -V

**Elective: Discipline Specific DSE (any three Papers) 1Geography & 2 Other Subjects)**

### **1A. Population Geography – 06 Credits**

*Five questions are to be answered out of eight questions selecting at least one question from each unit.*

*Full Marks: 70*

*Time: 3 hours*

*Internal Assessment: 30 marks*

1. Defining the Field – Nature and Scope; Sources of Data with special reference to India (Census, Vital Statistics and NSS).
2. Population Size, Distribution and Growth – Determinants and Patterns; Theories of Growth –Malthusian Theory and Demographic Transition Theory.
3. Population Dynamics: Fertility, Mortality and Migration – Measures, Determinants and Implications.
4. Population Composition and Characteristics – Age-Sex Composition; Rural and Urban Composition; Literacy.
5. Contemporary Issues – Ageing of Population; Declining Sex Ratio; HIV/AIDS.

#### **Reading List**

1. Barrett H. R., 1995: *Population Geography*, Oliver and Boyd.
2. Bhende A. and Kanitkar T., 2000: *Principles of Population Studies*, Himalaya Publishing House.
3. Chandna R. C. and Sidhu M. S., 1980: *An Introduction to Population Geography*, Kalyani Publishers.
4. Clarke J. I., 1965: *Population Geography*, Pergamon Press, Oxford.
5. Jones, H. R., 2000: *Population Geography*, 3rd ed. Paul Chapman, London.
6. Lutz W., Warren C. S. and Scherbov S., 2004: *The End of the World Population Growth in the 21st Century*, Earthscan
7. Newbold K. B., 2009: *Population Geography: Tools and Issues*, Rowman and Littlefield Publishers.
8. Pacione M., 1986: *Population Geography: Progress and Prospect*, Taylor and Francis.
9. Wilson M. G. A., 1968: *Population Geography*, Nelson.
10. Panda B P (1988): *Janasankya Bhugol*, M P Hindi Granth Academy, Bhopal
11. Maurya S D (2009) *Jansankya Bhugol*, Sharda Putak Bhawan, Allahabad
12. Chandna, R C (2006), *Jansankhya Bhugol*, Kalyani Publishers, Delhi
13. Tiwari, Ram Kumar (2015) *Jansankhya Bhugol*, Pravalika Publication, Allahabad
14. Roy, D.(2015) *Population Geography*, Books & Allied Publication, Kolkata

## Semester -VI

**Elective: Discipline Specific DSE (any three Papers) 1 Geography & 2 Other Subjects)**

### **1B. Hydrology and Oceanography – 06 Credits**

*Five questions are to be answered out of eight questions selecting at least one question from each unit.*

*Full Marks: 70*

*Time: 3 hours*

*Internal Assessment: 30 marks*

1. Hydrological Cycle: Systems approach in hydrology, human impact on the hydrological cycle; Precipitation, interception, evaporation, evapo-transpiration, infiltration, ground-water, run off and over land flow; Hydrological input and output.
2. River Basin and Problems of Regional Hydrology: Characteristics of river basins, basin surface run-off, measurement of river discharge; floods and droughts.
3. Ocean Floor Topography and Oceanic Movements – Waves, Currents and Tides.
4. Ocean Salinity and Temperature – Distribution and Determinants.
5. Coral Reefs and Marine Deposits and Ocean Resources: Types and Theories of Origin; Biotic, Mineral.

#### **Reading List**

1. Andrew. D. ward and Stanley, Trimble (2004): Environmental Hydrology, 2nd edition, Lewis Publishers, CRC Press.
2. Karanth, K.R., 1988 : Ground Water: Exploration, Assessment and Development, Tata-McGraw Hill, New Delhi.
3. Ramaswamy, C. (1985): Review of floods in India during the past 75 years: A Perspective. Indian National Science Academy, New Delhi.
4. Rao, K.L., 1982 : India's Water Wealth 2nd edition, Orient Longman, Delhi,.
5. Singh, Vijay P. (1995): Environmental Hydrology. Kluwar Academic Publications, The Netherlands.
6. Anikouchine W. A. and Sternberg R. W., 1973: *The World Oceans: An Introduction to Oceanography*, Prentice-Hall.
7. Garrison T., 1998: *Oceanography*, Wordsworth Company, Belmont.
8. Kershaw S., 2000: *Oceanography: An Earth Science Perspective*, Stanley Thornes, UK.
9. Pinet P. R., 2008: *Invitation to Oceanography* (Fifth Edition), Jones and Barlett Publishers, USA, UK and Canada.
10. Sharma R. C. and Vatal M., 1980: *Oceanography for Geographers*, Chaitanya Publishing House, Allahabad.
11. Sverdrup K. A. and Armbrust, E. V., 2008: *An Introduction to the World Ocean*, McGraw Hill, Boston.
12. Singh, M., Singh, R.B. and Hassan, M.I. (Eds.) (2014) Landscape ecology and water management. Proceedings of IGU Rohtak Conference, Volume 2. Advances in Geographical and Environmental Studies, Springer.