

**Choice Based Credit System B.A./B.Sc.
(Honours) Geography Syllabus**

	CORE COURSE (14)	Ability Enhancement Compulsory Course(AECC) (2)	Skill Enhancement Course(SEC) (2)	Elective: Discipline Specific DSE(4)	Elective: Generic (GE) (4) (Optional)
I	Geomorphology(GEOGH101CC)	(English/ Hindi/ MIL Communication)/ Environmental			GE-1 (GEOGH101GE)
	Cartographic Techniques (Practical) (GEOGH102CC)				
II	Human Geography(GEOGH203CC)	(English/ MIL Communication)/ Environmental			GE-2 (GEOGH202GE)
	Thematic Cartography (Practical) (GEOGH204CC)				
III	Climatology(GEOGH305CC)		Remote Sensing (Practical) (GEOGH301-1SEC) Or Advanced Spatial Statistical Techniques (GEOGH301-2SEC)		GE-3 (GEOGH303GE)
	Statistical Methods in Geography(Practical) (GEOGH306CC)				
	Geography of India (GEOGH307CC)				
IV	Economic Geography(GEOGH408CC)		Geographical Information System(Practical) (GEOGH402-1SEC) Or Research Methods (Practical) (GEOGH402-2SEC)		GE-4 (GEOGH404GE)
	Environmental Geography (GEOGH409CC)				
	Field Work and Research Methodology (Practical) (GEOGH410CC)				

V	Regional Planning and Development (GEOGH511CC)			Population Geography (GEOGH501-1DSE) or Resource Geography (GEOGH501-2DSE)	
	Remote Sensing and GIS (Practical) (GEOGH512CC)			Urban Geography (GEOGH502-1DSE) or Agricultural Geography (GEOGH502-2DSE)	
VI	Evolution of Geographical Thought (GEOGH613CC)			Geography of Health And Wellbeing (GEOGH603-1DSE) or Political Geography (GEOGH603-2DSE)	
	Disaster Management Based Project Work (Practical) (GEOGH614CC)			Hydrology and Oceanography (GEOGH604-1DSE) or Social Geography (GEOGH604-2DSE)	

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Note:

1. **Practical paper will not have tutorials.**

Core Courses

Semester I

1. Geomorphology
2. Cartographic Techniques (Practical)

Semester II

3. Human Geography
4. Thematic Cartography (Practical)

Semester III

5. Climatology
6. Statistical Methods in Geography (Practical)
7. Geography of India

Semester IV

8. Economic Geography
9. Environmental Geography
10. Field Work and Research Methodology (Practical)

Semester V

11. Regional Planning and Development
12. Remote Sensing and GIS (Practical)

Semester VI

13. Evolution of Geographical Thought
14. Disaster Management based Project Work (Practical)

Skill Enhancement Course (any 2)

Semester III

1. Remote Sensing (Practical)
2. Advanced Spatial Statistical Techniques

Semester IV

3. Geographical Information System (Practical)
4. Research Methods (Practical)

Elective Discipline Specific (any four)

Semester V

DSE-1

1. Population Geography
2. Resource Geography

DSE-2

3. Urban Geography
4. Agricultural Geography

Semester VI

DSE-3

5. Geography of Health and Wellbeing
6. Political Geography

DSE-4

7. Hydrology and Oceanography
8. Social Geography

Elective Generic Papers (any four)

Semester I

1. Disaster Management
2. Geography of Tourism

Semester II

3. Spatial Information Technology
4. Regional Development

Semester III

5. Climate Change: Vulnerability and Adaptation
6. Rural Development

Semester IV

7. Industrial Geography
8. Sustainable Development

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CORE COURSES

1. GEOMORPHOLOGY

Course Code	GEOGH 101 CC		
Credits-6	L	T	P
	65	25	0
Course Type	Core		
Lectures to be Delivered	90		

Continuous Comprehensive Assessment (CCA) Pattern: Maximum Marks Allotted: 30

Mid Term Test* (Marks)	Class Test/ Tutorials/Assignments (Marks)	Quiz/Seminars (Marks)	Attendance (Marks)	Total Marks
Total	15	5	5	30

* The pattern of examination for conducting the Mid Term Test will be same as prescribed for the end semester examination.

End Semester Examination System:

Maximum Marks Allotted	Minimum Pass Marks	Time Allotted
70	4 Numerical grade or as per University rules	3.00 Hrs

Paper Setting Scheme (Theory Paper)

Section	No of Questions	Syllabus Coverage	Nature of Questions and Answers	Questions to be Attempted	Maximum Marks
A	10	Complete	Objective Type	10(1 mark each)	4 Numerical grade or as per University rules
	4	Complete	Short answer type (25-50 words)	4 (3 marks each)	
B	2	Unit I	Choice based Long answer type	1(12 marks each)	
C	2	Unit II	Choice based Long answer type	1(12 marks each)	
D	2	Unit III	Choice based Long answer type	1(12 marks each)	
E	2	Unit IV	Choice based Long answer type	1(12 marks each)	
				TOTAL	D Grade

Course Content and Credit Scheme

Unit	Topic	Allotted Time (Hours)		
		L	T	P
I.	Introduction Geomorphology: Definition, Nature and Scope. Interior Structure of the Earth, Theory of Isostasy: Airy and Prentiss's Views	20	7	0
II.	Earth Movements Continental Drift, Plate Tectonics, Types of Folds and Faults, Earthquakes and Volcanoes.	15	6	0
III.	Geomorphic Processes: Weathering, Mass Wasting, Cycle of Erosion (Davis and Penck).	15	6	0
IV.	Evolution of Landforms (Erosional and Depositional): Fluvial, Karst, Aeolian and Glacial	15	6	0
Total Hours		65	25	0

L-Lecture, T-Tutorial and P-Practical and Practices

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.
11. Tikka, R.N. (1989): *Bhautik Bhugol ka Swaroop*, Kedarnath Ram Nath, Meerut
12. Singh, S (2009): *Bhautik Bhugol ka Swaroop*, Prayag Pustak, Allahabad

2. CARTOGRAPHIC TECHNIQUES: PRACTICAL

Course Code	GEOGH 102 CC		
Credits-6	L	T	P
	25	0	130(65)*
Course Type	Core		
Lectures to be Delivered	90		

Continuous Comprehensive Assessment (CCA) Pattern: Maximum Marks Allotted: 30

Mid Term Test* (Marks)	Class Test/ Tutorials/Assignments (Marks)	Quiz/Seminars (Marks)	Attendance (Marks)	Total Marks
Total	15	5	5	30

* The pattern of examination for conducting the Mid Term Test will be same as prescribed for the end semester practical examination.

Marks Allocation Scheme End Semester Practical (ESP) Examination System:

Particulars	Maximum Marks	Minimum Pass Marks	Time Allotted
Theory Paper	40	4 Numerical grade or as per University rules	3.00 Hrs
Written Lab work*	15		3.00 Hrs
Practical Record	10		
Viva-Voce	05		
Total	70		

***Note:** Use of non-programmable calculators and map stencils are allowed in the examination hall. The practical record may be evaluated on the parameters of Punctuality, Neatness, Entirety and indexing

Paper Setting Scheme for Written Lab Work#

Section	No of Questions	Syllabus Coverage	Nature of Questions and Answers	Questions to be Attempted	Maximum Marks
A	10	Complete	Objective Type	10	4 Numerical grade or as per University rules
	5	Complete	Short answer type (25-50 words)	5	
B	2	Unit I	Choice based Long answer type	1	
C	2	Unit II	Choice based Long answer type	1	
D	2	Unit III	Choice based Long answer type	1	
E	2	Unit IV	Choice based Long answer type	1	
Total					40

Note: The paper setting of written lab work for end semester practical (ESP) will be done by the Internal examiner set by the College Administration in consultation with senior teacher of the concerned subject.

Course Content and Credit Scheme

Unit	Topic	Allotted Time (Hours)		
		L	T	P
I.	Introduction Cartography – Nature and Scope History of Cartography	6	0	10(5)*
II.	Scales and Methods of Relief Representations Concept and application Graphical Construction of Plain, Comparative and Diagonal Scales. Methods of representing relief- Hachures, contouring and hill shading	6	0	30(15)*
III.	Map Projections Graphical Construction of Polar Zenithal Stereographic, Bonne's and Mercator's Projections, and Universal Transverse Mercator (UTM) Projection properties and uses	7	0	40(20)*
IV.	Topographical Map Interpretation of a Mountain area with the help of Cross and Longitudinal Profiles. Slope Analysis –Wentworth and Robinson's methods	6	0	50(25)*
	Total Hours	25	0	130 (65)*

L-Lecture, T-Tutorial and P-Practical and Practices

* As per the weightage assigned to the P (Practical and Practices) category in the CBCS regulations 2 hours practical work has been treated equal to 1 credit hour.

Practical Record: A Project File comprising one exercise *each* on scale, map projection, interpretation of topographic sheet and slope analysis.

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. Singh R. L. & Rana P. B. Singh (1991) *Prayogmak Bhugol ke Mool Tatva*, Kalyani Publishers, New Delhi
11. Sharma, J. P. (2010) *Prayogmak Bhugol ki Rooprekha*, Rastogi Publications, Meerut

3.HUMAN GEOGRAPHY

Course Code	GEOGH 203 CC		
Credits-6	L	T	P
	65	25	0
Course Type	Core		
Lectures to be Delivered	90		

Note: CCA & ESE scheme is same as in Paper GEOGH 101 CC

Course Content and Credit Scheme

Unit	Topic	Allotted Time (Hours)		
		L	T	P
I	Introduction Definition, Nature, Major Sub fields, Contemporary Relevance of Human Geography	20	7	0
II	Space and Society Cultural Regions of the world Human Races: Classification(Griffith Taylor) and world distribution Major Religions of the world and distribution Major languages of the world and distribution	15	6	0
III	Population World Population Distribution, density and growth, Demographic Transition Theory.	15	6	0
IV	Settlements Types and Patterns of Rural Settlements Classification of Urban settlements Trends and Patterns of World Urbanization	15	6	0
	Total Hours	65	25	0

L-Lecture, T-Tutorial and P-Practical and Practices

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. Hussain, Majid (2012) Manav Bhugol. Rawat Publications, Jaipur

4. THEMATIC CARTOGRAPHY-Practical

Course Code	GEOGH 204 CC		
Credits-6	L	T	P
	25	0	130(65)*
Course Type	Core		
Lectures to be Delivered	90		

Note: CCA and ESE scheme is same as in GEOGH 102 CC

Course Content and Credit Scheme

Unit	Topic	Allotted Time (Hours)		
		L	T	P
I.	Introduction Maps–Classification and Types Principles of Map Design.	6	0	10(5)*
II.	Diagrammatic Data Presentation Line, Bar and Circle	6	0	30(15)*
III.	Thematic Mapping Techniques Properties, Uses and Limitations: Point Data- Dot Method, Line Data- Isopleth and Area Data-- Proportional Circles and Choropleth	7	0	40(20)*
IV.	Representation of climatic data Hythergraph, Climograph and Windrose Diagram	6	0	50(25)*
	Total Hours	25	0	130 (65)*

L-Lecture, T-Tutorial and P-Practical and Practices

* As per the weightage assigned to the P (Practical and Practices) category in the CBCS regulations 2hours practical work has been treated equal to 1 credit hour.

Practical Record: A Thematic Atlas should be prepared on a specific theme with five plates of any state in India.

Reading List

1. Cuff J. D. and Mattson M. T., 1982: *Thematic Maps: Their Design and Production*, Methuen Young Books
2. Dent B.D., Torguson J.S., and Holder T.W., 2008: *Cartography: Thematic Map Design* (6th Edition), Mcgraw-Hill Higher Education
3. Gupta K. K. and Tyagi V.C., 1992: *Working with Maps*, Survey of India, DST, NewDelhi.
4. KraakM.-J.and Ormeling F.,2003: *Cartography: Visualization of Geo-Spatial Data*, Prentice-Hall.
5. Mishra R.P. and Ramesh A., 1989: *Fundamentals of Cartography*, Concept, New Delhi.
6. Sharma J. P., 2010: *Prayogic Bhugol*, Rastogi Publishers,Meerut.
7. Singh R.L.and Singh R.P.B.,1999: *Elements of Practical Geography*, KalyaniPublishers.
8. Slocum T. A., McMaster R.B. and Kessler F. C.,2008: *Thematic Cartography and Geovisualization* (3rd Edition),Prentice Hall.
9. Tyner J. A., 2010: *Principles of Map Design*, The Guilford Press.
- 10.Sarkar, A.(2015) *Practical geography: A systematic approach*. OrientBlack SwanPrivate Ltd.,New Delhi
- 11.Singh, LR&SinghR(1977):*Manchitra or Pnyaogatamek Bhugol* ,Central Book,Depot,Allahabad