

Punyashlok Ahilyadevi Holkar Solapur University, Solapur



Name of the Faculty: Science and Technology

CHOICE BASED CREDIT SYSTEM

Syllabus: Geography

Name of the Course: B.Sc.I (Sem-I & II)

(Syllabus to be implemented from w.e.f. June 2019)

**Course Structure for B.Sc. - I Geography
Programme (Semester I & II)**

Sr. No.	Semester	Name of the Course	Category	Paper
1	Semester- I	Geomorphology -I	DSC- 1A-	I
2	Semester- I	Geomorphology-II	DSC- 1A-	II
3	Semester- II	Human Geography-I	DSC- 1B-	III
5	Semester- II	Human Geography-II	DSC-1B-	IV
6	Semester- I &II	Cartographic techniques (Practical)I	DSC- 1A	Practical I
		Cartographic techniques (Practical)II	DSC- 1B	Practical II

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

Faculty of Science

Draft Structure for B. Sc-I

Core Subject: Geography

Choice Based Credit System (CBCS) (w.e.f.2019-20)

Subject/ Core Course	Name and Type of the Paper		No. of papers/ Practical	Hrs/week			Total Marks Per Paper	UA	CA	Credits
	Type	Name		L	T	P				
Class : B.Sc.- I Semester – I										
Ability Enhancement Course(AECC)	English (communication skill)		Paper- I	4.0			100	80	20	4.0
Core (*Students can opt any Four Subjects from the Twelve Subjects Listed below. Out of these Four Subjects One Subject will be CORE and other Three will be ELECTIVE Subjects.)	DSC 1A Geomorphology-I		Paper-I	2.5	--	--	50	40	10	4.0
	Geomorphology-II		Paper-II	2.5	--	--	50	40	10	
	DSC 2A		Paper-I	2.5	--	--	50	40	10	4.0
			Paper-II	2.5	--	--	50	40	10	
	DSC 3A		Paper-I	2.5	--	--	50	40	10	4.0
			Paper-II	2.5	--	--	50	40	10	
	DSC 4A		Paper-I	2.5	--	--	50	40	10	4.0
			Paper-II	2.5	--	--	50	40	10	
Total				24	--	--	500	400	100	20
Class : B.Sc.- I Semester - II										
Ability Enhancement Course(AECC)	English (communication skill)		Paper- II	4.0			100	80	20	4.0
Core (*Students can opt any Four Subjects from the Twelve Subjects Listed below. Out of these Four Subjects One Subject will be CORE and other Three will beELECTIVE Subjects.)	DSC1B Human Geography-I		Paper-III	2.5	--	--	50	40	10	4.0
	Human Geography-II		Paper-IV	2.5	--	--	50	40	10	
	DSC 2B		Paper-III	2.5	--	--	50	40	10	4.0
			Paper-IV	2.5	--	--	50	40	10	
	DSC 3B		Paper-III	2.5	--	--	50	40	10	4.0
			Paper-IV	2.5	--	--	50	40	10	
	DSC 4B		Paper-III	2.5	--	--	50	40	10	4.0
			Paper-IV	2.5	--	--	50	40	10	
	Democracy, Elections and Good Governance			3.0			50	40	10	NC
Total (Theory)				27	--	--	550	440	110	20

Core	DSC 1 A & 1B Cartographic Techniques I	Practical I and II	--	--	4	100	80	20	4.0
	Cartographic Techniques II								
	DSC 2 A & 2B	Practical I and II	--	--	4	100	80	20	4.0
	DSC 3A & 3B	Practical I and II	--	--	4	100	80	20	4.0
	DSC 4A & 4B	Practical I and II	--	--	4	100	80	20	4.0
Total (Practical)					16	400	320	80	16
Grand Total			51		16	1450	1160	290	56

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

Faculty of Science

Draft Structure for B. Sc-II

Core Subject: Geography

Choice Based Credit System (CBCS) (w.e.f.2020-21)

Subject/ Core Course	Name and Type of the Paper		No. of papers/ Practical	Hrs/week			Total Marks Per Paper	UA	CA	Credits
	Type	Name		L	T	P				
Class :	B.Sc.- II Semester – III									
Core (*Students can opt any Three subjects among the Four Subjects offered at B.Sc.I. Out of Three Subjects offered One Subject will be the Core Subject OR	DSC 1C Climatology & Geography of India		Paper-V	3.0	--	--	50	40	10	4.0
			Paper-VI	3.0	--	--	50	40	10	
	DSC 2C		Paper-V	3.0	--	--	50	40	10	4.0
			Paper-VI	3.0	--	--	50	40	10	
	DSC 3C		Paper-V	3.0	--	--	50	40	10	4.0
			Paper-VI	3.0	--	--	50	40	10	
	AECC - Environmental Studies			3.0	--	--	-	-	-	NC
	SEC-1			2.5			50	40	10	2.0
Grand Total				23.5	--	--	350	280	70	14

Class :		B.Sc.- II Semester – IV								
Core (*Students can opt any Three subjects among the Four Subjects offered at B.Sc.I. Out of Three Subjects offered One Subject will be the Core Subject OR Students can opt any Two subjects among the Four Subjects offered at B.Sc.I. Out of Two Subjects One Subject will be the Core Subject and any One Subject among the other will be Elective Subject	DSC 1D Economic Geography & Environmental Geography	Paper-VII	3.0	--	--	50	40	10	4.0	
		Paper-VIII	3.0	--	--	50	40	10		
	DSC 2D	Paper-VII	3.0	--	--	50	40	10	4.0	
		Paper-VIII	3.0	--	--	50	40	10		
	DSC 3D	Paper-VII	3.0	--	--	50	40	10	4.0	
		Paper-VIII	3.0	--	--	50	40	10		
	SEC-2			2.5			50	40	10	2.0
	Total (Theory)			20.5	--	--	350	280	70	14
DSE (Practical)	DSC 1C & 1D	Pr. III&IV	--	--	8	100	80	20	4.0	
	Statistical Methods in Geography & Field Work and Research Methodology									
	DSC 2C & 2D	Pr. III&IV	--	--	8	100	80	20	4.0	
	DSC 3C & 3D	Pr. III&IV	--	--	8	100	80	20	4.0	
Total (Practical)					24	300	240	60	12	
Grand Total			43.5		24	1000	800	200	40	

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

B. Sc. I Semester I

Subject- Geography

Title of the paper- Geomorphology- I

Paper No-I (Geography DSC - 1 A-)

Total Lectures: 30

Objectives:

- The objective of this course is to introduce the latest concepts in Geomorphology, Specifically in Earths Characteristics, Rocks and Diastrophic movements.
- To familiarize the students with some geomorphological concepts and processes takes place on the earth surface and within the earth crust.

Outcomes:

- Students will get basic ideas of Geomorphology
- Students became aware of interior structure of earth, Movements on the earth surface

Unit I : Introduction to Geomorphology 10

- 1.1 Meaning and Definition
- 1.2 Nature and scope of Geomorphology
- 1.3 Importance of Geomorphology

Unit II : Earth 10

- 2.1 Interior Structure of the earth
- 2.2 Rocks: Types and characteristics

Unit II : Earth Movements 10

- 3.1 Plate tectonic theory
- 3.2 Types of Folds and Faults
- 3.3 Earthquakes and Volcanoes

References:

1. Clyton K., (1986), Earth Crust, AdusBook , London.
2. Davis W. M., (1909), Geographical Essay, Ginnia Co.
3. Dayal P., (1996), Text Book of Geomorphology, Shukla Book Depot, Patna.
4. Kale V.S. and Gupta A., (2001), Elements of Geomorphology, Oxford University Press, Kolkata.
5. Kale V.S. and Gupta A., (2001), Elements of Geomorphology, Oxford Univ. Press.
6. Monkhouse, (1951), Principle of Physical Geography, McGraw Hill Pub – New York.
7. Pitty A. F., (1974), Introduction to Geomorphology, Methuen London.
8. Singh Savindra, (2000), Physical Geography, PrayagPustakBhavan, 20-A, University Road, Allahabad – 211002.
9. Wooldridge S. W. and Morgan R. S., (1959), The Physical Basis of Geography and Outline of Geomorphology, Longman Green and Co. London.

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

B. Sc. I Semester I

Subject- Geography

Title of the paper- Geomorphology- II

Paper No-II (Geography DSC - 1 A)

Total Lectures: 30

Objectives:

- The objective of this course is to introduce the latest concepts in Geomorphology, Specifically in Geomorphic Processes and Evolution of Landforms.

Outcomes:

- Students can bitterly understand all latest concepts in Geomorphology in brief but in adequate manner.
- Students Became aware of Geomorphic Processes

Unit I : Geomorphic Processes	10
1.1 Weathering	
1.2 Mass Wasting	
1.3 Cycle of Erosion by W.M.Davis	
Unit II : Evolution of Landforms I(Erosional and Depositional)	10
2.1 Fluvial	
3.2 Aeolian	
Unit III : Evolution of Landforms II (Erosional and Depositional)	10
3.1 Coastal	
3.2 Karst	
3.3 Glacial	

References:

1. Clyton K., (1986), Earth Crust, AdusBook , London.
2. Davis W. M., (1909), Geographical Essay, Ginnia Co.
3. Dayal P., (1996), Text Book of Geomorphology, Shukla Book Depot, Patna.
4. Kale V.S. and Gupta A., (2001), Elements of Geomorphology, Oxford University Press, Kolkata.
5. Kale V.S. and Gupta A., (2001), Elements of Geomorphology, Oxford Univ. Press.
6. Monkhouse, (1951), Principle of Physical Geography, McGraw Hill Pub – New York.
7. Pitty A. F., (1974), Introduction to Geomorphology, Methuen London.
8. Singh Savindra, (2000), Physical Geography, PrayagPustakBhavan, 20-A, University Road, Allahabad – 211002.
9. Wooldridge S. W. and Morgan R. S., (1959), The Physical Basis of Geography and Outline of Geomorphology, Longman Green and Co. London.

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

B. Sc. I Semester II

Subject- Geography

Title of the paper- Human Geography -I

Paper No-III(Geography DSC-1B)

Total Lectures: 30

Objectives:

- The objective of this course is to introduce the latest concepts in Human Geography, Specifically in Human Race, Human Culture and tribes.

Outcomes:

- Students will get basic ideas of Human Geography
- They will learn to identify and analyze how Geographical factors affect human activities and characteristics.

Unit I :Introduction to Human Geography 10

- 1.1 Meaning and Definition.
- 1.2 Nature and Scope
- 1.3 Branches of Human Geography
- 1.4 Importance of Human Geography

Unit II :Human Race 10

- 2.1 Definition and concept
- 2.2 Basis of racial classification
- 2.3 Racial Classification of Griffith Taylor

Unit III :Human Culture and Tribes 10

- 3.1 Religious Groups in the World
- 3.2 Language Groups in the World
- 3.3 Major tribes in the world- Eskimo, Bushmen & Naga.

References:

1. Chandna, R.C. (2010) Population Geography, Kalyani Publisher.
2. Hassan, M.I. (2005) Population Geography, Rawat Publications, Jaipur
3. Johnston R; Gregory D, Pratt G. et al. (2008) The Dictionary of Human Geography, Blackwell Publication.
4. Singh, R.Y. : Geography of Settlement, 1998
5. Chandana R.C. 1988 : Geography of Population, Kalyani Pub. Ludharyana
6. Hussin M. : Human Geography 1994
7. Money D.S. : Human Geography
8. Perpillou A.V. : Human Geography, Longman, London- 1986
9. Robinson H. : Human Geography, 1976

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

B. Sc. I Semester II

Subject- Geography

Title of the paper- Human Geography II

Paper No-IV(Geography DSC-1B)

Total Lectures: 30

Objectives:

- The objective of this course is to introduce the latest concepts in Human Geography, Specifically in Population growth, Characteristics of Population, Settlements and Agriculture.

Outcomes:

- The students can better understand all latest concepts in Human Geography in brief but in adequate manner Students will get basic ideas of Human Geography

Unit I : Population

10

- 1.1 Growth of Population.
- 2.2 Factors Affecting on the Distribution of World Population.
- 1.3 Distribution of the World Population.
- 1.4 Demographic Transition Theory.
- 1.5 Age and Sex composition

Unit II : Human Settlements

10

- 2.1 Rural Settlements: Types, Pattern and functions.
- 2.2 Urban Settlements: classification.
- 2.3 Trends and patterns of World Urbanization.
- 2.4 Problems of urban settlement

Unit III : Agriculture

10

- 3.1 Origin and History of Agriculture
- 3.2 Types of Agriculture
- 3.3 Factors affecting on Agriculture
- 3.4 Problems of Agriculture

References:

1. Chandna, R.C. (2010) Population Geography, Kalyani Publisher.
2. Hassan, M.I. (2005) Population Geography, Rawat Publications, Jaipur
3. Johnston R; Gregory D, Pratt G. et al. (2008) The Dictionary of Human Geography, Blackwell Publication.
4. Singh, R.Y. : Geography of Settlement, 1998
5. Chandana R.C. 1988 : Geography of Population, Kalyani Pub. Ludharyana
6. Hussin M. : Human Geography 1994
7. Money D.S. : Human Geography
8. Perpillou A.V. : Human Geography, Longman, London- 1986
9. Robinson H. : Human Geography, 1976

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

B. Sc. I Semester I and II

Subject- Geography

Title of the paper- Cartographic techniques-I

Practical Paper No-I(Geography DSC- 1A)

Objectives:

- The objective of this course is to expose students to basic cartographic techniques in Geography

Outcomes:

- On Completion of this course Student will understand Various cartographic techniques and its importance

Unit I Map 10

1.1 Definition,

1.2 Elements and Types ,: Maps and Globe – Similarities and Differences,:

1.3 Significance and uses of Maps and Globes.

Unit II Map Scale 10

2.1 Meaning and Definition,

2.2 Methods of Representation of scale:i) Verbalii) Numericaliii) Graphical, Scale Conversion:i) Verbal to Numericalii) Numerical to Verbal

2.3 Construction of Graphical Scale:i) Simple (Plane Scale):ii) Time and Distance Scale:iii) Diagonal Scale

Unit III: Map Projection 10

3.1 Definition and Classification of Map Projection

i) Based on the methods of Construction –Perspective and Non-perspective

ii) Based on Developable Surface used -Conical, Cylindrical, Zenithal, Conventional.

iii) Based on Position of Tangent Surfaces –Polar, Equatorial (normal), Oblique.

iv) Based on Position of view point or light –Gnomonic, Stereographic, Orthographic

v) Based on Preserved qualities -

i) Equal area projection (Homolographic)

ii) Orthographic Projection

iii) Azimuthal Projection (True Bearing Projection)

3.2 Graphical Construction of the following Projections:

i) Zenithal Polar Gnomonic Projection

ii) Zenithal polar Equidistant Projection

iii) Zenithal Polar Equal Area Projection

iv) Cylindrical Equal –Area Projection

v) Simple Conical Projection with one standard Parallel.

Reference Books

1. Buoygoot, J. (1964), An Introduction to Mapwork and Practical Geography. University Tutorial, London.
2. Monkhouse, F. J. and Wilkinson, H. R. (1971), Maps and Diagrams. Methuen, London.
3. Raisz, E. (1962), Principles of Cartography, McGraw Hill Book Co., Inc, New York.
4. Robinson, A.H. and Shale, R. D. (1969), Elements of Cartography. John Wiley and Sons, Inc, New York.
5. Singh, L.R. and Singh, R., (1973), Mapwork and Practical Geography. Allahabad.
6. Curran, P. (1989), Principles of Remote Sensing, Logman, London.
7. Lo C. P. and Young A. K. W., (2011), Concepts and Techniques of Geographic Information Systems, PHI Learning Private Lim., New Delhi – 110001.
8. Dickinson, G.C., (1979), Maps and Air Photographs, Arnold Publisher, New Delhi.
9. Mishra, R.P and Ramesh A., (2000), Fundamentals of Cartography. Concept Publ. Co., New Delhi.
10. Burrough, P. A. and McDonell, R., (1998), Principles of Geographical Information Systems, Oxford University Press, Oxford.

Punyashlok Ahilyadevi Holkar Solapur University, Solapur

B. Sc. I Semester I and II

Subject- Geography

Title of the paper- Cartographic techniques-II

Practical Paper No-II(Geography DSC- 1B)

Objectives:

- The objective of this course is to enable students to learn and apply basic and advance Cartographic techniques like Landform analysis, statistical data representation and remote sensing.

Outcomes:

- Student will be able to appreciate the use of Landform analysis, statistical data and remote sensing in cartography.

Unit I: Landform analysis techniques

10

1.1 Concept of Contours and drawing of cross section to depict contour landforms

- i) Mountain ii) Plateau iii) Conical hill iv) V shaped Valley v) Pass vi) Waterfall
- vii) Sea cliff viii) convex Slope ix) Concave slope x) Even slope xi)uneven slope
- xii)Terraced slope

1.2 Methods of expression of slopes by Gradient Degree, Percentage, Miles.

Unit II: Representation of Statistical Data

10

2.1 Graphs and Diagrams

i) One Dimensional Diagrams:

a) Band Graph

b) Climograph

c) Hythergraph

2.2 Two Dimensional Diagrams:

a) Proportional Circle

b) Proportional Spheres

2.3 Three Dimensional Diagram: Cube Diagram

2.4 Distributional Diagram

a) Choropleth Map

b) Isoleths Map

Unit III: Remote Sensing

10

3.1 Definition, Concept and history of Remote Sensing

3.2 Elements of Remote Sensing: EMR, Sensors and Platforms.

3.3 Application of Remote Sensing in Geography

3.4 Aerial photographs and Satellite imagery: Definition, types and difference

Between them.

3.5 Identification of Physical and cultural features from Aerial Photographs or Satellite Imagery with the help of stereoscope.

3.6 Determination of Photo Scale.

Reference Books

1. Buoygoot, J. (1964), An Introduction to Mapwork and Practical Geography. University Tutorial, London.
2. Monkhouse, F. J. and Wilkinson, H. R. (1971), Maps and Diagrams. Methuen, London.
3. Raisz, E. (1962), Principles of Cartography, McGraw Hill Book Co., Inc, New York.
4. Robinson, A.H. and Shale, R. D. (1969), Elements of Cartography. John Wiley and Sons, Inc, New York.
5. Singh, L.R. and Singh, R., (1973), Mapwork and Practical Geography. Allahabad.
6. Curran, P. (1989), Principles of Remote Sensing, Logman, London.
7. Lo C. P. and Young A. K. W., (2011), Concepts and Techniques of Geographic Information Systems, PHI Learning Private Lim., New Delhi – 110001.
8. Dickinson, G.C., (1979), Maps and Air Photographs, Arnold Publisher, New Delhi.
9. Mishra, R.P and Ramesh A., (2000), Fundamentals of Cartography. Concept Publ. Co., New Delhi.
10. Burrough, P. A. and McDonell, R., (1998), Principles of Geographical Information Systems, Oxford University Press, Oxford.