Punyashlok Ahilyadevi Holkar Solapur University, Solapur

NAAC Accredited-2022
'B++' Grade (CGPA 2.96)

Name of the Faculty: Science & Technology

CHOICE BASED CREDIT SYSTEM

Syllabus: Geography

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

(Syllabus to be implemented from June 2022)

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)	DSC- 1A	Practical I
		Cartographic Techniques (Practical)	DSC- 1B	

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Faculty of Science

Draft Structure for B. Sc-I

Core Subject:Geography

Choice Based Credit System (CBCS) (w.e.f.2022-23)

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 GoodGovernance		3.0			50	40	10	NC
Total (Theory)				27	--	--	550	440	110	20

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

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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 and Earth **15**

1.1 Meaning, Definition, Nature and Scope of Geomorphology

1.2 Interior Structure of the Earth

1.3 Rocks : Types and characteristics

Unit II : Earth Movements **15**

2.1 Continental Drift Theory – Alfred Wegner

2.2 Types of Folds and Faults

2.3 Earthquakes and Volcanoes

References:

1. Clyton K., (1986), Earth Crust, Adus Book,London.
2. Davis W. M., (1909), Geographical Essay, GinniaCo.
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 – NewYork.
7. Pitty A. F., (1974), Introduction to Geomorphology, MethuenLondon.
8. Singh Savindra, (2000), Geomorphology, Prayag Pustak Bhavan, 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.
10. Majjid Husain : Physical Geography Rawat Publication Jaipur

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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 Evolutionof Landforms.

Outcomes:

- Students can bitterly understand all latest concepts in Geomorphologyin brief but in adequatemanner.
- Students Became aware of GeomorphicProcesses

Unit I : Geomorphic Processes **15**

1.1 Meaning and Types of Weathering
1.2 Mass Wasting
1.3 Cycle of Erosion by W. M. Davis

Unit II : Evolution of Landforms (Erosional and Depositional) **15**

2.1 Fluvial
2.2 Aeolian
2.3 Coastal
2.4 Glacial

References:

1. Clyton K., (1986), Earth Crust, Adus Book ,London.
2. Davis W. M., (1909), Geographical Essay, GinniaCo.
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 – NewYork.
7. Pitty A. F., (1974), Introduction to Geomorphology, MethuenLondon.
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 Geographyand Outline of Geomorphology, Longman Green and Co.London

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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:

- 1) Students will get basic ideas of Human Geography
- 2) They will learn to identify and analyze how Geographical factors affects on human activities and characteristics.

Unit I : Introduction to Human Geography and Human Races and Sub races 15

1.1 Meaning, Definition, Nature, Scope, branches and importance of Human Geography.

1.2 Introduction to Races.

1.3 Basis of racial classification and characteristics of Major races.

1.4 Racial classification of Griffith Taylor

Unit II: Human Culture and Tribes 15

2.1 Religious Groups in the World

2.2 Language Groups in the World

2.3 Major tribes in the world- Eskimo, Bushmen & Naga.

References:

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

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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 bitterly understand all latest concepts in Human Geography in brief but in adequate manner Students will get basic ideas of Human Geography

Unit I : Population **15**

1.1 Growth of Population

1.2 Factors Affecting on the Distribution of World Population.

1.3 Distribution of the World Population

1.4 Age and Sex Ratio

1.5 Demographic Transition Theory.

Unit II: Human Settlements and Agriculture **15**

2.1 Rural Settlements: Types, Pattern and functions, Urban settlements:- Functional Classification

2.2 Trends and patterns of World Urbanization

2.3 Problems of urban settlement and remedies

2.4 Origin and History of Agriculture

2.5 Factors affecting on Agriculture

2.6 Types of Agriculture and Problems of Indian 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. Ludhayana
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

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B. Sc. I Semester I and II
Subject- Geography
Title of the Paper- Cartographic Techniques
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 and Map Scale **15**

A) Map

1. Definition, Elements and Types of Map

2. Significance and uses of Maps and Globes.

B) Map Scale

1. Meaning and Definition,

2. Methods of Representation of scale: i) Verbal ii) Numerical iii) Graphical

3. Conversion of Scale: Verbal to Numerical ii) Numerical to Verbal

4. **Construction of Graphical Scale**: i) Simple Graphical (Plane Scale), ii) Time and Distance Scale

Unit II: Map Projection **15**

A) Definition and Classification of Map Projection

1. Based on the methods of Construction -Perspective and Non-perspective

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

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

4. Based on Position of view point or light –Gnomonic, Stereographic, Orthographic

5. Based on Preserved qualities -

   i) Equal area projection (Homolographic)

   ii) Orthographic Projection

B) Graphical Construction of the following Projections:

1. Zenithal Polar Gnomonic Projection

2. Zenithal Polar Equal Area Projection

3. Cylindrical Equal - Area Projection

4. Simple Conical Projection with one standard Parallel.

Reference Books

1. Buoygoot, J. (1964), An Introduction to Mapwork and Practical Geography. University Tutorial, London.
2. Monkhose, F. J. and Wilkinson, H. R. (1971), Maps and Diadgrams. Mathuen, London.
3. Raisz, E. (1962), Principals of Cartography, McGraw Hill Book Com., 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. Com., New Delhi.
10. Burrough, P. A. and McDonell, R., (1998), Princinciples of Geographical Information Systems, Oxford University Press, Oxferd.

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B. Sc. I Semester I and II
Subject- Geography
Title of the Paper- Cartographic Techniques
Practical Paper No-I (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 and Representation of Statistical Data 15

A) Landform analysis techniques

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 vii) Convex Slope viii) Concave slope ix) Even slope x) Uneven slope xi)Terraced slope

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

B) Representation of Statistical Data

Graphs and Diagrams

1. One Dimensional Diagrams: a) Climograph b) Hythergraph
2. Two Dimensional Diagrams: a) Proportional Circle b) Proportional Spheres
3. Three Dimensional Diagram: Cube Diagram
4. Distributional Diagram a) Choropleth Map b) Isopleths Map

Unit II: Remote Sensing 15

1. Definition and Concept of Remote Sensing
2. Elements of Remote Sensing: EMR, Sensors and Platforms.
3. Application of Remote Sensing in Geography
4. Aerial photographs and Satellite imagery: Definition, types and difference between them.
5. Identification of Physical and cultural features from Aerial Photographs or Satellite Imagery with the help of stereoscope.

Reference Books

1. Buoygoot, J. (1964), An Introduction to Mapwork and Practical Geography. University Tutorial, London.
2. Monkhose, F. J. and Wilkinson, H. R. (1971), Maps and Diadgrams. Mathuen, London.
3. Raisz, E. (1962), Principals of Cartography, McGraw Hill Book Com., Inc, New York.
4. Robinson, A.H. and Shale, R. D. (1969), Elements of Cartography. John Wiley and Sons, Inc, New York.
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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. Com., New Delhi.
10. Burrough, P. A. and McDonell, R., (1998), Princinciples of Geographical Information Systems, Oxford University Press, Oxferd.

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Equivalent Subject for OLD Syllabus
B.Sc. I (CBCS Pattern) w.e.f. June 2022

Sr. No.	Name of the Old Paper	Name of the New Paper
1	Geomorphology -I	Geomorphology-I
2	Geomorphology -II	Geomorphology -II
3	Human geography-I	Human Geography-I
4	Human Geography-II	Human Geography -II
5	Cartographic Techniques- I	Cartographic Techniques
6	Cartographic Techniques-II	Cartographic Techniques