

# Shri Sangameshwar Education Society's **Sangameshwar College, Solapur [Autonomous]** (Affiliated to Punyashlok Ahilyadevi Holkar Solapur University, Solapur) Kannada Linguistic Minority Institute **NAAC Accredited with 'A' Grade (III Cycle CGPA 3.39)**

Academic Council 1(6) 2<sup>nd</sup> July, 2020

UG Science Programme: B.Sc.-I To be implemented from A.Y. 2020-2021

System: Choice Based Credit System (CBCS) with SGPA and CGPA

B.O.S. in: Geography

Structure and Examination for: Discipline Specific Core Courses (DSC-A and DSC-B)

Semester	Course		Teaching Scheme/week			
Semester			Course Code	Hours	Lectures	Credits
		Theory-I: Geomorphology- I	2031116	4	5	4
Ι	DSC-A	Theory-II: Geomorphology- II	2031117		, J	
		Practical-I: Cartographic Techniques-I	2031227	3.2	4	2
		Theory-I: Human Geography-I	2031216	4	5	4
Π	DSC-B	Theory-II: Human Geography-II	2031217		5	•
		Practical-I: Cartographic Techniques-II	2031227	3.2	4	2

Table-1

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## Table-2

			EXAMINATION			
Semester	Course			Marks		
				SEE	Total	-
Ι	DSC-A	Theory-I: Geomorphology- I	15	35	50	4
1	DSC-A	Theory-II: Geomorphology- II	15	35	50	
	DSC-B	Theory-I: Cartographic Techniques-I	15	35	50	- 4
II	DSC-D	Theory-II: Human Geography-I	15	35	50	
	DSC-A & DSC-B	Practical-I: Human Geography-II	30	70	100	4

#### CA: Continuous Assessment SE: Semester End

## Note: -

The above structure (Table-1 and Table-2) is for Sem-I and Sem-II of the undergraduate  $\mathrm{B.Sc.-I}^{\,\star}$ 

/B.S.Ecs.-I /B.C.A.-I programmes under science faculty.

\* B.Sc.-I Select any four DSC form Chemistry /Physics /Mathematics /Statistics /Electronics /Botany /Zoology /Geography /Psychology.

DSC: Discipline Specific Core Course AECC: Ability Enhancement Compulsory Course Passing in each course is compulsory including Democracy. course.

SGPA/CGPA and Total Marks will be calculated excluding AECC and Democracy.

courses.

# **Compulsory Course:**

DEMOCRAC Y	200023 2	DEMOCRACY ELECTIONS AND GOVERNANCE
PHY EDU	200023 3	PHYSICAL EDUCATION

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Syllabus for: Discipline Specific Core Courses (DSC-A and DSC-B)

# B. Sc. I (CBCS Pattern) Discipline Specific Core Courses (DSC-C) SEM I DSC-A Theory-I Geography-I (2031116)

## Title: Geomorphology- I

# Credit:2

# Learning Objectives:

- To make the students familiar with new terms and concepts of Geomorphology
- To Understand the Interior Structure of the earth.
- To analyze the theories of origin of continent and ocean
- To explain the earth movements

## **Course Outcome:**

- Demonstrate concepts of Geomorphology
- Remember the Interior Structure of the earth.
- Classify Rocks and explain its characteristics
- Compare the earth movements

# Marks: 50 Lectures: 30 Hours

Unit1	Contents: <b>Introduction to Geomorphology</b> 1.1 Meaning and Definition 1.2 Nature and scope of Geomorphology 1.3 Importance of Geomorphology	7
Unit2	Contents: <b>Earth</b> 2.1 Interior Structure of the earth 2.2 Rocks: Types and characteristics	8
Unit3	Contents: 3.1 Continental Drift Theory 3.2 Plate tectonic theory	8
Unit4	Contents: Earth <b>Movements</b> 4.1 Types of Folds and Faults 4.2 Earthquakes and Volcanoes	7

# **References:**

- 1. Clyton K., (1986), Earth Crust, Adus Book, London.
- 2. Davis W. M., (1909), Geographical Essay, Ginnia Co.
- 3. Daval 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.

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# **B. Sc. I (CBCS Pattern) Discipline Specific Core Courses (DSC-C) SEM I** DSC-A Theory-II Geography-II (2031117)

# **Title: Geomorphology- II**

## Credit:2

## Learning Objectives:

- To make the students familiar with Geomorphic Process
- To Understand the Concept of Erosion
- To analyze the erosional and depositional landforms of fluvial and Aeolian
- To explain the Coastal Karst Glacial landforms •

## **Course Outcome:**

- Demonstrate concepts of Geomorphic Process
- Remember the Concept and cycle of Erosion ۲
- Understand concept and Cycle of Erosion

Marks: 50 **Lectures: 30 Hours** 

• Compare the erosional and depositional

Unit 1	Contents: Geomorphic Process	
	1.1 Weathering	8
	1.2 Mass Wasting	
	Contents:	
Unit 2	2.1 Concept of Erosion	7
	2.2 Theory of Cycle of Erosion by W.M. Davis	
	Contents: Evolution of Landforms I (Erosional and Depositional)	
Unit 3	3.1 Fluvial	7
	3.2 Aeolian	
Unit 4	Contents: Evolution of Landforms II (Erosional and Depositional)	
	4.1 Coastal	8
	4.2 Karst	8
	4.3 Glacial	

#### **References:**

1. Clyton K., (1986), Earth Crust, Adus Book, 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, 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.

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# B. Sc. I (CBCS Pattern) Discipline Specific Core Courses (DSC-C) SEM II DSC-B Theory-I Geography-III (2031216) Title: Human Geography -I

# Credit:2

Marks: 50 Lectures: 30 Hours

## Learning Objectives:

- 1. To understand origin of Human Geography
- 2. To study the Human race.

- 3. To analyze the Human Culture
- 4. To study the Tribes

## **Course Outcome:**

- Understand concept of Human Geography
- Classify and Compare race
- Analyze the Human Culture through religious and language group in the world
- Compare the tribes in cold desert and mountain region

11.41	Contents: Introduction to Human Geography	
	1.1 Meaning and Definition.	7
Unit 1	1.2 Nature and Scope	/
	1.3 Branches of Human Geography	
	1.4 Importance of Human Geography	
	Contents: Human Race	
Unit 2	2.1 Definition and concept	8
Clift 2	2.2 Basis of racial classification	U U
	2.3 Racial Classification of Griffith Taylor	
	Contents: Human Culture	
Unit 3	3.1 Religious Groups in the World	8
	3.2 Language Groups in the World	
Unit 4	Contents: Tribes	
	4.1 Cold Region - Eskimo,	7
	4.2 Desert Region- Bushmen	
	4.3 Mountain Region -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. Ludhayana
- 6. Hussin M.: Human Geography 1994
- 7. Money D.S.: Human Geography
- 8. Perpillou A.V.: Human Geography, Longman, London- 1986

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#### B. Sc. I (CBCS Pattern) Discipline Specific Core Courses (DSC-C) SEM II DSC P Theory II Coography IV (2031217)

# DSC-B Theory-II Geography-IV (2031217)

Title: Human Geography -II

Credit:2

Marks: 50 Lectures: 30 Hours

Learning Objectives:

- 1. To understand population growth
- 2. To analyze the distribution of population
- 3. To study the concept of settlement
- 4. To analyze the term Agriculture

# **Course Outcome:**

- Understand concept of population
- Compare growth and distribution of population
- Compare rural and urban settlements
- Classify Factors affecting on Agriculture
- Solve the Problems of Agriculture

Unit 1	Contents: <b>Population</b> 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	7
Unit 2	Contents:Rural Settlements2.1 Concept of Settlement2.2 Types Rural Settlements2.3 Pattern and functions of Rural Settlement	7
Unit 3	Contents: <b>Urban Settlements</b> 3.1 Urban Settlements: classification. 3.2 Trends and patterns of World Urbanization. 3.3 Problems of urban settlement	8
Unit 4	Contents: Agriculture 4.1 Origin and History of Agriculture 4.2 Types of Agriculture 4.3 Factors affecting on Agriculture 4.4 Problems of Agriculture	8

# **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 (CBCS Pattern) Discipline Specific Core Courses (DSC-C) SEM II

# DSC-A Practical-I Geography Practical-I (2031227)

# Title: Cartographic techniques-I

# Credit:2

Marks: 50 Lectures: 30 Hours

## **Learning Objectives:**

- To introduce the students about cartographic techniques and tools.
- To introduce the students to Classification of Map scale and Projection
- To Acquaint the student with Map Projection

#### **Course Outcome:**

- Construct proper map through cartographic techniques and tools.
- Make use of proper Map Scale
- Construct and classify Projection of Maps

#### Title Experiment Map 1.1 Definition, 1 1.2 Elements and Types, Maps and Globe – Similarities and Differences, 1.3 Significance and uses of Maps and Globes. **Map Scale** 2.1 Meaning and Definition, 2.2 Methods of Representation of scale: i) Verbal ii) Numerical iii) Graphical, Scale 2 Conversion: i) Verbal to Numerical ii) Numerical to Verbal 2.3 Construction of Graphical Scale: i) Simple (Plane Scale): ii) Time and Distance Scale: iii) Diagonal Scale **Map Projection 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 and Conventional. iii) Based on Position of Tangent Surfaces – Polar, Equatorial (normal), and Oblique. iv) Based on Position of view point or light -Gnomonic, Stereographic, Orthographic 3 v) Based on Preserved qualities i) Equal area projection (Homolographic) ii) Orthographic Projection iii) Azimuthal Projection (True Bearing Projection) **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 Journal and Viva 4

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# B. Sc. I (CBCS Pattern) Discipline Specific Core Courses (DSC-C) SEM II

### **DSC-A Practical-I Geography Practical-I (2031227)**

# Title: Cartographic techniques-II

## Credit:2

Marks: 50 Lectures: 30 Hours

# Learning Objectives:

- To introduce the students about landform analysis techniques and tools.
- To introduce the students with Statistical Data
- To Acquaint the student with Remote Sensing

# **Course Outcome:**

- Construct proper map through cartographic techniques and tools.
- Make use of proper Statistical Data and methods
- Remember the concept of Remote Sensing

Experiment	Title		
1	Landform analysis techniques 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 vii) convex Slope viii) Concave slope ix) Even slope x) Uneven slope xi)Terraced slope 1.2 Methods of expression of slopes by Gradient Degree, Percentage, Miles.		
2	Representation of Statistical Data         2.1 Graphs and Diagrams         i) One Dimensional Diagrams:         a) Climograph         b) Hythergraph         2.2 Two Dimensional Diagrams: Proportional Circle         2.3 Three-Dimensional Diagram: Cube Diagram         2.4 Distributional Diagram: Choropleth Map		
3	<ul> <li>Remote Sensing</li> <li>3.1 Definition, Concept and history of Remote Sensing</li> <li>3.2 Elements of Remote Sensing: EMR, Sensors and Platforms.</li> <li>3.3 Application of Remote Sensing in Geography</li> <li>3.4 Aerial photographs and Satellite imagery: Definition, types and difference Between them.</li> <li>3.5 Identification of Physical and cultural features from Aerial Photographs or Satellite Imagery with the help of stereoscope.</li> <li>3.6 Determination of Photo Scale</li> </ul>		
4	Journal and Viva		

# **Teaching-Learning Equipments/Tools:**

Contour Maps, Charts, Satellite Imageries and Aerial Photographs and Maps and Globe Multimedia and Internet

# **Teaching-Learning Methods:**

Lecture Method, Laboratory Method, Observation Method, Problem Solving Method

## **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 Diagrams. 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), Principles of Geographical Information Systems, Oxford University Press, Oxford.