

Ahmednagar Jilha Maratha Vidya Prasarak Samaj's

**New Arts, Commerce, and Science College, Ahmednagar
(Autonomous)**

(Affiliated to Savitribai Phule Pune University, Pune)



**National Education Policy (NEP)
Choice Based Credit System (CBCS)**

**Programme Framework
B. A. Geography (Major)**

**Implemented from
Academic Year 2023-24**

Ahmednagar Jilha Maratha Vidya Prasarak Samaj's
New Arts, Commerce and Science College, Ahmednagar
(Autonomous)

Board of Studies in Geography

Sr. No.	Name	Designation
1.	Dr. Anand P. Pandit	Chairman
2.	Prof. Bhagwan N. Kumbhar	Member
3.	Dr. Yogesh G. Kadam	Member
4.	Professor Dr. Sachin J. Deore	Academic Council Nominee
5.	Dr. Pandurang P. Chaudhari	Academic Council Nominee
6.	Prof. Sandip N. Deshmukh	Vice-Chancellor Nominee
7.	Dr. Asaram S. Jadhav	Alumni
8.	Mr. Vinit T. Bitla	Industry Expert
9.	Dr. Satish D. Kulakrni	Member (co-opt)
10.	Dr. Digambar D. Ahire	Member (co-opt)

1. Prologue/ Introduction of the programme:

Students enrolled in the program will complete a curriculum that exposes and train students in a full range of essential skills and abilities. They will have the opportunity to master the geographical knowledge. The discipline of geography is mainly concerned with changes in spatial attributes from a temporal perspective. This programme in geography is tailored to meet the student's specific educational and professional goals in mind. It focuses on spatial studies, qualitative as well as quantitative, and emphasizes the human-environment relationship. During the first year of the programme, students study the fundamental knowledge related to the subject of geography. It covers various papers including 'Basics of Geography', 'Fundamentals of the Earth' and 'Advanced Concepts in Physical and Human Geography'. From the second year, students allow to concentrate more on specific areas of the subject in which they learn fieldwork, survey and complete empirical survey reports. The skill-based and vocational knowledge related to subject geography including GIS, RS and GPS is also given to students which helps them to get jobs in various sectors. After completing the course, the students will be adequately prepared for professional careers in geography and allied disciplines like GIS and Remote Sensing. They will be able to pursue M.A. /M.Sc. degree in Geography. The programme tries to give equal importance to the two main branches of Geography: Physical and Human. The principal goal of the programme is to enable the students to acquire adequate geographical and allied knowledge and to secure a job using that knowledge at the end of the undergraduate programme. Keeping this in mind and in tune with the changing nature of subject geography, adequate emphasis is given to applied aspects of the subject such as emerging techniques of mapping and field-based data generation.

2. Programme Outcomes (POs)

After completion of this programme students will

1. Understand the physical and human features that exist over the earth and the interrelationship among them.
2. Acquire survey skills through study tours and field visits.
3. Understand and evaluate different geographical theories and principles and be able to correlate them with actual scenarios.
4. Analyze the various disasters and be able to apply disaster management strategies to minimize disasters and their effects.
5. Learn advanced techniques of geographical analysis like Geographical Information System, Remote Sensing and Global Positioning System and their applications.
6. Able to secure jobs using knowledge of geography, geographical information system and remote sensing techniques in government and private sectors.

Credit Distribution: B. A. Geography (Major) including Minor and OE and other courses.

	Type of Courses	III Yr	IV Yrs (Honours)	IV Yrs Research
Major Geography	Discipline-Specific Courses (DSC)	46	74	66
	Discipline Specific Elective (DSE)	08	16	16
	Skill Enhancement Courses (SEC)	06	06	06
	Vocational Skill Courses (VSC)	08	08	08
	On-Job Training (OJT)	04	08	04
	Field Project (FP)	04	04	04
	Community Engagement and Service (CEP)	02	02	02
	Research project	00	00	12
	Research Methodology	00	04	04
	Indian Knowledge System	02	02	02
	Total (I, II and III Year)	80	124	124
Minor	Minor	20	20	20
Other Courses	Open Elective (OE)/ Multidisciplinary Courses	12	12	12
	Co-Curricular Courses	08	08	08
	Ability Enhancement Courses	08	08	08
	Value Education Courses	04	04	04
	Total	132	176	176

B. A. Programme Framework: Credit Distribution

			DSC	DSE	SEC	VSC	FP/ OJT /IN/CEP	IKS							
I	I	4.5	06	-	02	-	-	02	03	03	-	02	02	02	22
I	II	4.5	06	-	02	02	-	-	03	03	-	02	02	02	22
Exit Option: Award of UG Certificate in Major with 44 credits and an additional 4 credit core NSQF course /Internship or Continue with Major and Minor															
II	III	5.0	08	-	02	-	FP-02	-	03	03	-	02	02	-	22
II	IV	5.0	08	-	00	02	CEP-02	-	03	03	-	02	02	-	22
Exit Option: Award of UG Diploma in Major with 88 credits and an additional 4 credit core NSQF course/Internship or Continue with Major and Minor															
III	V	5.5	10	04	-	02	FP-02	-	04	-	-	-	-	-	22
III	VI	5.5	08	04	-	02	OJT-04	-	04	-	-	-	-	-	22
								-							
Exit Option: Award of 3-Yr UG Degree in Major and Minor with 132 credits or continue with Major for a 4-year Degree															
IV	VII	6.0	14	04	RM:04	-	-	-	-	-	-	-	-	-	22
IV	VIII	6.0	14	04	-	-	OJT-04	-	-	-	-	-	-	-	22
4-Yr UG Degree (Honors) with Major and Minor with 176 credits															

IV	VII	6.0	10	04	RM:04	-	RP-04		-	-	-	-	-	22
IV	VIII	6.0	10	04	-	-	RP-08		-	-	-	-	-	22
4-Yr UG Degree (Honors with Research) with Major and Minor with 176 credits														

B.A Programme Framework: Course Distribution

Year	Semester	Level	Major						Minor	OE	CC	AEC	VEC	Total
			DSC	DSE	SEC	VSC	FP/OJT /IN/CEP	IKS						
I	I	4.5	02	-	01	-	-	01	01	01	01	01	01	09
I	II	4.5	02	-	01	01	-	-	01	01	01	01	01	09
Exit Option: Award of UG Certificate in Major with 44 credits and an additional 4 credit core NSQF Course /Internship or Continue with Major and Minor														
II	III	5.0	03	-	01	-	01	-	01	01	01	01	-	09
II	IV	5.0	03	-	-	01	01	-	01	01	01	01	-	09
Exit Option: Award of UG Diploma in Major with 88 credits and an additional 4 credit core NSQF Course /Internship or Continue with Major and Minor														
III	V	5.5	03	01	-	01	01	-	01	-	-	-	-	07
III	VI	5.5	02	01	-	01	01	-	01	-	-	-	-	06
Exit Option: Award of 3-Yr UG Degree in Major and Minor with 132 credits or continue with Major for a 4-year Degree														
IV	VII	6.0	04	01	RM:01	-	-	-	-	-	-	-	-	06
IV	VIII	6.0	04	01	-	-	01	-	-	-	-	-	-	06
4-Yr UG Degree (Honors) with Major with 176 credits														
IV	VII	6.0	03	01	RM:01	-	01	-	-	-	-	-	-	06
IV	VIII	6.0	03	01	-	-	01	-	-	-	-	-	-	05
4-Yr UG Degree (Honors with Research) with Major with 176 credits														

Programme Framework (Course Distribution): B. A. Geography (Major)

Year	Semester	Level	Major		SEC	VSC	FP/OJT /IN/CEP	IKS
			DSC	DSE				
I	I	4.5	02	00	01	00	00	01
I	II	4.5	02	00	01	01	00	-
II	III	5.0	03	00	01	00	FP-01	-
II	IV	5.0	03	00	00	01	CEP-01	-
III	V	5.5	03	01	00	01	FP-01	-
III	VI	5.5	02	01	00	01	OJT-01	-
IV	VII	6.0	04	01	RM:01	00	-	-
IV	VIII	6.0	04	01	00	00	OJT-01	-
IV	VII	6.0	03	01	RM:01	00	RP-01	-

IV	VIII	6.0	03	01	00	00	RP-01	-
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Programme Framework (Credit Distribution): B. A. Geography (Major)

Year	Semester	Level	Major					
			DSC	DSE	SEC	VSC	FP/OJT /IN/CEP	IKS
I	I	4.5	06	00	02	00	00	02
I	II	4.5	06	00	02	02	00	-
Exit Option: Award of UG Certificate with 44 credits and an additional 4 credit core NSQF course /Internship or Continue with Major and Minor								
II	III	5.0	08	00	02	00	FP-02	-
II	IV	5.0	08	00	00	02	CEP-02	-
Exit Option: Award of UG Diploma with 88 credits and an additional 4 credit core NSQF course /Internship or Continue with Major and Minor								
III	V	5.5	10	04	00	02	FP-02	-
III	VI	5.5	08	04	00	02	OJT-04	-
Exit Option: Award of UG Degree in Major and Minor with 132 credits or continue with a Major for 4-year Degree with honours or honours with research								
IV	VII	6.0	14	04	RM:04	00	00	-
IV	VIII	6.0	14	04	00	00	OJT-04	-
4-year Degree (Honours)								
IV	VII	6.0	10	04	RM:04	00	RP-04	-
IV	VIII	6.0	10	04	00	00	RP-08	-
4-year Degree (Honours with Research)								

Programme Framework (Courses and Credits): B. A. Geography (Major)

Sr. No.	Year	Sem ester	Level	Course Type	Course Code	Title	Credits
1.	I	I	4.5	DSC-1	BA-GO111T	Basics of Geography	03
2.	I	I	4.5	DSC-2	BA-GO112T	Fundamentals of the Earth	03
3.	I	I	4.5	SEC-1	BA-GO113P	Elements of Cartography and Field Visit	02
4.	I	I	4.5	IKS-1	BA-GO114T	Agricultural Heritage of India	02
5.	I	II	4.5	DSC-3	BA-GO121T	Physical Geography	03
6.	I	II	4.5	DSC-4	BA-GO122T	Human Geography	03
7.	I	II	4.5	SEC-2	BA-GO123P	Basics of Surveying and Map Projection	02
8.	I	II	4.5	VSC-1	BA-GO124P	Surveying I	02
9.	II	III	5.0	DSC-5	BA-GO231T	Elements of Geomorphology	03
10.	II	III	5.0	DSC-6	BA-GO232T	Elements of Climatology	03
11.	II	III	5.0	DSC-7	BA-GO233T	Elements of Population Geography	02
12.	II	III	5.0	SEC-3	BA-GO234P	Scale and Map Projection	02
13.	II	III	5.0	FP-01	BA-GO235P	Field Project	02
14.	II	IV	5.0	DSC-8	BA-GO241T	Elements of Oceanography	03
15.	II	IV	5.0	DSC-9	BA-GO242T	Elements of Settlement Geography	03
16.	II	IV	5.0	DSC-10	BA-GO243T	Environmental Geography	02
17.	II	IV	5.0	VSC-2	BA-GO244P	Surveying II	02
18.	II	IV	5.0	CEP-01	BA-GO245T	Village Survey	02
19.	III	V	5.5	DSC-11	BA-GO351T	Physical Geography of Maharashtra	04
20.	III	V	5.5	DSC-12	BA-GO352T	Physical Geography of India	04
21.	III	V	5.5	DSC-13	BA-GO353T	Watershed Management	02
22.	III	V	5.5	DSE-01	BA-GO354T	Agriculture Geography	04
23.	III	V	5.5	VSC-3	BA-GO355P	Techniques of Spatial Analysis I	02
24.	III	V	5.5	FP-02	BA-GO356P	Field Project	02
25.	III	VI	5.5	DSC-14	BA-GO361T	Human Geography of Maharashtra	04
26.	III	VI	5.5	DSC-15	BA-GO362T	Human Geography of India	04

27.	III	VI	5.5	DSE-2	BA-GO363T	Contemporary Issues and Geography	04
28.	III	VI	5.5	VSC-4	BA-GO364P	Techniques of Spatial Analysis II	02
29.	III	VI	5.5	OJT-01	BA-GO365T	On Job Training	04

B. A. Geography (Honors)

Sr. No.	Year	Semester	Level	Course Type	Course Code	Title	Credits
30.	IV	VII	6.0	DSC-16	BA-GO471T	Principles of Geomorphology	03
31.	IV	VII	6.0	DSC-17	BA-GO472T	Principles of Climatology	03
32.	IV	VII	6.0	DSC-18	BA-GO473T	Principles of Population Geography	02
33.	IV	VII	6.0	DSC-19	BA-GO474P	Practicals in Geomorphology	02
34.	IV	VII	6.0	DSC-20	BA-GO475P	Practicals in Climatology	02
35.	IV	VII	6.0	DSC-21	BA-GO476P	Practicals in Population Geography	02
36.	IV	VII	6.0	DSE-03	BA-GO477T (A)	Principles of Settlement Geography	02
37.	IV	VII	6.0	DSE-04	BA-GO477T (B)	Agricultural Geography	02
38.	IV	VII	6.0	DSE-05	BA-GO478P (A)	Practicals in Settlement Geography	02
39.	IV	VII	6.0	DSE-06	BA-GO478P (B)	Practicals in Agricultural Geography	02
40.	IV	VII	6.0	RM-01	BA-GO479T/P	Research Methodology	04
41.	IV	VIII	6.0	DSC-22	BA-GO481T	Principles of Economic Geography	03
42.	IV	VIII	6.0	DSC-23	BA-GO482T	Population Geography	03
43.	IV	VIII	6.0	DSC-24	BA-GO483T	Geography of Rural Settlement	02
44.	IV	VIII	6.0	DSC-25	BA-GO484P	Practicals in Economic	02

						Geography	
45.	IV	VIII	6.0	DSC-26	BA-GO485P	Practicals in Surveying	02
46.	IV	VIII	6.0	DSC-27	BA-GO486P	Practicals in Map Projection	02
47.	IV	VIII	6.0	DSE-07	BA-GO487T (A)	Geoinformatics - I	02
48.	IV	VIII	6.0	DSE-08	BA-GO487T (B)	Coastal Geomorphology	02
49.	IV	VIII	6.0	DSE-09	BA-GO488P (A)	Practicals in Geoinformatics - I	02
50.	IV	VIII	6.0	DSE-10	BA-GO488P (B)	Practicals in Coastal Geomorphology	02
51.	IV	VIII	6.0	OJT-01	BA-GO489P	On Job Training	04

B. A. Geography (Honors with Research)

Sr. No.	Year	Semester	Level	Course Type	Course Code	Title	Credits
52.	IV	VII	6.0	DSC-16	BA-GO471T	Principles of Geomorphology	03
53.	IV	VII	6.0	DSC-17	BA-GO472T	Principles of Climatology	03
54.	IV	VII	6.0	DSC-18	BA-GO473P	Practicals in Geomorphology	02
55.	IV	VII	6.0	DSC-19	BA-GO474P	Practicals in Climatology	02
56.	IV	VII	6.0	DSE-03	BA-GO475T (A)	Principles of Settlement Geography	02
57.	IV	VII	6.0	DSE-04	BA-GO475T (B)	Agricultural Geography	02
58.	IV	VII	6.0	DSE-05	BA-GO476P (A)	Practicals in Settlement Geography	02
59.	IV	VII	6.0	DSE-06	BA-GO476P (B)	Practicals in Agricultural Geography	02
60.	IV	VII	6.0	RM-01	BA-GO477T/P	Research Methodology	04
61.	IV	VII	6.0	RP-01	BA-GO478PR	Research Project	04
62.	IV	VIII	6.0	DSC-20	BA-GO481T	Principles of Economic Geography	03
63.	IV	VIII	6.0	DSC-21	BA-GO482T	Population Geography	03

64.	IV	VIII	6.0	DSC-22	BA-GO483P	Practicals in Economic Geography	02
65.	IV	VIII	6.0	DSC-23	BA-GO484P	Practicals in Surveying	02
66.	IV	VIII	6.0	DSE-07	BA-GO485T (A)	Geoinformatics - I	02
67.	IV	VIII	6.0	DSE-08	BA-GO485T (B)	Coastal Geomorphology	02
68.	IV	VIII	6.0	DSE-09	BA-GO486P (A)	Practicals in Map Projection	02
69.	IV	VIII	6.0	DSE-10	BA-GO486P (B)	Practicals in Coastal Geomorphology	02
70.	IV	VIII	6.0	RP-02	BA-GO489PR	Research Project	08

Ahmednagar Jilha Maratha Vidya Prasarak Samaj's
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Syllabus
B. A. Geography (Major)

Title of the Course: Basics of Geography								
Year: I					Semester: I			
Course Type	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CIE	ESE	Total
DSC-1	BA-GO111T	03	00	03	45	30	70	100

Learning Objectives:

1. To understand the origin and development of geography as a discipline.
2. To make the student aware of branches and importance of geography
3. To realize the importance of geography in personal and professional life.
4. To comprehend the theories of the origin of the universe.
5. To acquire the knowledge of universe, solar system and allied concepts.

Course Outcomes (COs):

After completion of this course students will

1. Understand the origin and development of geography.
2. Well aware of branches and the importance of geography.
3. Realize the importance of geography in personal and professional life.
4. Understand the theories of the origin of the universe.
5. Acquaint with the universe, solar system and allied concepts.

Detailed Syllabus:

Unit I: Introduction to Geography (12)

- a. Definitions and Origin of Geography
- b. Nature of Geography
- c. Scope of Geography
- d. Approaches in Geography: Determinism, Possibilism and Neo Determinism

Unit II: Branches and Importance of Geography (15)

- a. Branches of Geography
 - i. Physical and Human Geography
 - ii. Systematic and Regional Geography

iii. Cartography

b. Importance of Geography

Unit III: The Universe and Solar System

(18)

a. Theories of Origin of Universe

i. Big-Bang Theory

ii. Steady State Theory

iii. Pulsating Universe Theory

b. Concept of Light Day and Light Year

c. Galaxy, Star, Constellations, Planets and Satellite

d. Our Solar System

e. Asteroids, Meteorites and Comets

Suggested Readings/Material:

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 Univ. Press.
5. Kale V.S. and Gupta A., (2015): Introduction of Geomorphology, University Press, PVT Kolkata.
6. Monkhouse, (1951): Principle of Physical Geography, McGraw Hill Pub – New York.
7. More, Pagar & Thorat (2014): Elements of Climatology & Oceanography, (Marathi), Atharv Publication, Pune
8. Pitty A. F., (1974): Introduction to Geomorphology, Methuen London.
9. S Mukherjee (1996): Understanding Physical Geography Through Diagrams, Orient Blackswan (Pvt) Ltd
10. Singh Savindra, (2000): Physical Geography, Prayag Pustak Bhavan, 20-A, University Road, Allahabad – 211002.
11. Steers J. A., (1964): The Unstable Earth Some Recent Views in Geography, Kalyani Publishers, New Delhi.
12. Swaroop Shanti, (2006): Physical Geography, King Books, Nai Sarak, Delhi – 110006.
13. 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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Syllabus
B. A. Geography (Major)

Title of the Course: Fundamentals of the Earth								
Year: I				Semester: I				
Course Type	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CIE	ESE	Total
DSC-2	BA-GO112T	03	00	03	45	30	70	100

Learning Objectives:

1. To get knowledge of the origin of the Earth.
2. To make students aware of the motions of the Earth and allied phenomena.
3. To get knowledge of Earth's size, shape and measurement.
4. To understand concepts of latitude, longitude and time.
5. To make the student aware of the physical regions of the Earth.

Course Outcomes (COs):

After completion of this course students will

1. Understand the origin of the earth.
2. Well aware of the motions of the earth and allied phenomena.
3. Acquaint knowledge of the size, shape and measurements of the earth.
4. Understand the concept of latitude, longitude and time.
5. Well aware of the physical regions of the earth.

Detailed Syllabus:

Unit I: Motions of the Earth

(15)

- a. Origin of the Earth
- b. Motions of the Earth
 - i. Rotation
 - ii. Revolution
- c. Solstice and Equinoxes
- d. Formation of Seasons
- e. Eclipses: Solar and Lunar

Unit II: Measurements of the Earth

(15)

- a. Size and Shape
- b. Radius, Diameter and Circumference
- c. Latitudes and Parallels of Latitude
- d. Longitudes and Meridians of Longitudes
- e. Local time, Standard Time, Greenwich Mean Time and International Date Line
- f. Calculation of date and time based GMT

Unit III: Physical Regions of the Earth

(15)

- a. Spheres of the Earth
- b. Continents and Oceans
- c. Major physical regions
 - i. Plains, Plateaus and Mountain ranges
 - ii. Forests and Deserts

Suggested Readings/Material:

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 Univ. Press.
5. Kale V.S. and Gupta A., (2015): Introduction of Geomorphology, University Press, PVT Kolkata.
6. Monkhouse, (1951): Principle of Physical Geography, McGraw Hill Pub – New York.
7. More, Pagar & Thorat (2014): Elements of Climatology & Oceanography, (Marathi), Atharv Publication, Pune
8. Pitty A. F., (1974): Introduction to Geomorphology, Methuen London.
9. S Mukherjee (1996): Understanding Physical Geography Through Diagrams, Orient Blackswan (Pvt) Ltd
10. Singh Savindra, (2000): Physical Geography, Prayag Pustak Bhavan, 20-A, University Road, Allahabad – 211002.
11. Steers J. A., (1964): The Unstable Earth Some Recent Views in Geography, Kalyani Publishers, New Delhi.
12. Swaroop Shanti, (2006): Physical Geography, King Books, Nai Sarak, Delhi – 110006.
13. Wooldridge S. W. and Morgan R. S., (1959): The Physical Basis of Geography and Outline of Geomorphology, Longman Green and Co. London.

14. मोरे, पगार आणि थोरात (२०१९): प्राकृतिक भूगोल व मानवी भूगोल, प्रशांत प्रकाशन, जळगाव.
15. चव्हाण, साळुंके, नजन, सोनवणे आणि मंडलिक (२०१९): प्राकृतिक भूगोल व मानवी भूगोल, प्रशांत प्रकाशन, जळगाव.

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Syllabus
B. A. Geography (Major)

Title of the Course: Elements of Cartography and Field Visit								
Year: I				Semester: I				
Course Type	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CIE	ESE	Total
SEC-1	BA-GO113P	00	02	02	60	15	35	50

Learning Objectives:

1. To understand concepts of the map, its types and uses.
2. To get knowledge of map scales and their types.
3. To understand the quantitative and qualitative methods of data representation.
4. To make students aware of the importance and stages of field visits.

Course Outcomes (COs):

After completion of this course students will

1. Understand the concept of maps and the types and uses of maps.
2. Acquaint with the knowledge of map scales and their types.
3. Understand the quantitative and qualitative methods of data representation.
4. Well aware of the field visit, its importance and stages.

Detailed Syllabus:

Unit I: Map and Map Scale (10)

- a. Map: Definitions and Elements
- c. Types of Maps
- d. Uses of Maps
- e. Map Scale: Definitions and Types

Unit II: Quantitative Methods of Data Representation (20)

- a. Simple and Multiple Line graph
- b. Simple, Multiple and Compound Bar graph
- c. Pie Chart

- d. Tally Marks, Frequency table and Histogram

Unit III: Qualitative Methods of Data Representation (20)

- a. Symbol method
- b. Dot method
- c. Choropleth method
- d. Isopleth method
- e. Flow diagram

Unit IV: Study Tour/Field Visit (10)

- a. Meaning and Importance of Field Visit
- b. Stages of Field Visit
- c. Study Tour/Field Visit for observations of geographical places

Suggested Readings/Material:

1. Sharma J. P., 2010, Prayogic Bhugol, Rastogi Publishers, Meerut.
2. Singh R. L. and Singh R. P. B., 1999, Elements of Practical Geography, Kalyani Publishers.
3. Slocum T. A., McMaster R. B. and Kessler F. C., 2008, Thematic Cartography and Geo visualization (3rd Edition), Prentice Hall.
4. Tyner J. A., 2010, Principles of Map Design, The Guilford Press.
5. Sarkar A., 2015, Practical Geography: A Systematic Approach, Orient Black Swan Private Ltd., New Delhi
6. Singh R. L. and Dutta P. K., 2012, Prayogatama Bhugol, Central Book Depot, Allahabad
7. Ahirrao Y., Karanjkehe E. K., 2002, Practical Geography, Sudarshan Publication, Nashik
8. Saptarshi P. G., Jog S. R., Statistical Methods.
9. Karlekar S. N., 2008, Statistical Methods, Diamond Publication, Pune
10. Kanetkar T. P., Kulkarni S. V., 1986, Surveying and Leveling, Pune Vidyarthi Griha Publication, Pune
11. Kumbhare A., Practical Geography,
12. Saha P., Basu P., 2007, Advanced Practical Geography, Books and Allied (P) Ltd, Kolkata.
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B. A. Geography (Major)

Title of the Course: Agricultural Heritage of India								
Year: I				Semester: I				
Course Type	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CIE	ESE	Total
IKS-1	BA-GO114T	02	00	02	30	15	35	50

Learning Objectives:

1. To make students well aware of Indian agricultural heritage.
2. To understand the Need and Importance of studying Indian agriculture.
3. To make students well aware of ancient agricultural practices.
4. To comprehend the knowledge of weather forecasting and local farming knowledge.

Course Outcomes (COs):

After completion of this course students will

1. Well aware of Indian agricultural heritage.
2. Understand the Need and Importance of studying Indian agriculture.
3. Well aware of ancient agricultural practices.
4. Comprehend the knowledge of weather forecasting and local farming knowledge.

Detailed Syllabus:

Unit I: Introduction (08)

- a. Introduction of Indian agricultural heritage
- b. Need and Importance for studying Agricultural Heritage
- c. Beginning of Agricultural in India
- d. Available documents on Indian Agricultural Heritage

Unit II: Ancient Agricultural Practices (06)

- a. Soil Classification
- b. Methods of maintaining soil productivity
- c. Methods of conserving rainwater harvesting

Unit III: Weather Forecasting and Local Farming Knowledge (10)

- a. Local knowledge used to predict rain, drought and weather patterns
- b. Local knowledge used to reduce drought impact and extreme weather
- c. Local Farming Knowledge in India
 - i. Animal Healthcare Practices
 - ii. Plant Protection and Post Harvest Management
 - iii. Weather Forecasting

Unit IV: Sustainable Natural Resource Management (06)

- a. Soil and Water Management
- b. Indigenous seed conservation and preservation

Suggested Readings/Material:

1. Nene, Y.L. and Choudhary, S.L. 2002. Agricultural heritage of India. Asian Agri – History foundation, Secunderabad.
2. Randhawa, M.S., 1980 – 86. A history of Agriculture in India. Vol. I, II, III and IV. Indian council of Agricultural Research, New Delhi.
3. Raychaudhuri, S.P. 1964. Agriculture in ancient India. Indian council of Agricultural Research, New Delhi.
4. Razia Akbar (Tr) 2000. Muskhada Dar Fauni – Falahat (The art of agriculture). Agri – History Bulletin No. 3. Asian Agri. History foundation, Secunderabad.
5. Sadhale Nalini (Tr) 1996. Surapala's Vrikshayurveda (The science of plant life). Asian. History Bulletin No. 1. Asian – Agri – History foundation, Secunderabad.
6. Sadhale, Nalini (Tr) 1999. Krishi – Parashara (Agriculture by Parashara). Agri-History Bulletin No. 2. Asian Agri – History foundation, Secunderabad, India
7. A textbook on Ancient History of Indian Agriculture Saxena, R.C., Choudhary, S.L. and Nene, Y.L., 2009. Publisher: Munshiram Manoharlal Publishers Pvt. Ltd. New Delhi.
8. Indian Agricultural Heritage Subrahmanyam, C. B. S., 2014. Publisher: Green Infrastructure Projects Pvt. Ltd. Bangalore.
9. Glimpses of the Agricultural Heritage of India Nene, Y. L. 2007. Publisher: Asian Agri. History Foundation, Secunderabad.

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B. A. Geography (Major)

Title of the Course: Physical Geography								
Year: I					Semester: II			
Course Type	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CIE	ESE	Total
DSC-3	BA-GO121T	03	00	03	45	30	70	100

Learning Objectives:

1. To make students well aware of the basic concepts of physical geography.
2. To understand various theories in physical geography.
3. To recognize the relationship between pressure belts and wind system.
4. To understand the relationship between the lithosphere, atmosphere, biosphere and hydrosphere.
5. To understand concepts related to the hydrosphere.

Course Outcomes (COs):

After completion of this course students will

1. Well aware of the basic concepts of Physical geography.
2. Understand concepts and theories in Physical geography.
3. Recognize the relationship between pressure belts and wind system.
4. Understand the basics of lithosphere, atmosphere, Biosphere, hydrosphere and their relationship.

Detailed Syllabus:

Unit I: Introduction to Physical Geography (11)

- a. Definitions of Physical Geography
- b. Nature and Scope of Physical Geography
- c. Branches of Physical Geography
- d. Earth system - Lithosphere, Atmosphere, Hydrosphere and Biosphere

Unit II: Lithosphere (12)

- a. Interior of the Earth
 - i) Sources of Knowledge
 - ii) Structure and Composition of Interior of the Earth
- b. Wegener's Continental Drift Theory
- c. Theory of Plate Tectonics

Unit III: Atmosphere (12)

- a. Structure of the atmosphere
- b. Heat Budget of the Earth
- c. Pressure belts and wind system
- d. Forms and types of Precipitation

Unit IV: Hydrosphere (10)

- a. Hydrological cycle
- b. General structure of ocean floor
- c. Waves and Tides

Suggested Readings/Material:

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 Univ. Press.
5. Kale V.S. and Gupta A., (2015): Introduction of Geomorphology, University Press, PVT Kolkata.
6. Monkhouse, (1951): Principle of Physical Geography, McGraw Hill Pub – New York.
7. More, Pagar & Thorat (2014): Elements of Climatology & Oceanography, (Marathi), Atharv Publication, Pune
8. Pitty A. F., (1974): Introduction to Geomorphology, Methuen London.
9. S Mukherjee (1996): Understanding Physical Geography Through Diagrams, Orient Blackswan (Pvt) Ltd
10. Singh Savindra, (2000): Physical Geography, Prayag Pustak Bhavan, 20-A, University Road, Allahabad – 211002.
11. Steers J. A., (1964): The Unstable Earth Some Recent Views in Geography, Kalyani Publishers, New Delhi.

12. Swaroop Shanti, (2006): Physical Geography, King Books, Nai Sarak, Delhi – 110006.
13. Wooldridge S. W. and Morgan R. S., (1959): The Physical Basis of Geography and Outline of Geomorphology, Longman Green and Co. London.
14. मोरे, पगार आणि थोरात (२०१९): प्राकृतिक भूगोल व मानवी भूगोल, प्रशांत प्रकाशन, जळगाव.
15. चव्हाण, साळुंके, नजन, सोनवणे आणि मंडलिक (२०१९): प्राकृतिक भूगोल व मानवी भूगोल, प्रशांत प्रकाशन, जळगाव.

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B. A. Geography (Major)

Title of the Course: Human Geography								
Year: I					Semester: II			
Course Type	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CIE	ESE	Total
DSC-4	BA-GO122T	03	00	03	45	30	70	100

Learning Objectives:

1. To make students well aware of the basic concepts of human geography.
2. To understand the Demographic Transition Theory and basic concepts related to the population with special reference to India.
3. To acquaint the knowledge of types and patterns of rural settlement.
4. To recognize the concept of urbanization with special reference to Maharashtra and India.
5. To understand the types and factors affecting agriculture and recognize the problems of Indian agriculture.

Course Outcomes (COs):

After completion of this course students will

1. Well aware of the basic concepts of human geography.
2. Understand the Demographic Transition Theory and basic concepts related to the population with special reference to India.
3. Acquaint with the knowledge of types and patterns of rural settlement.
4. Recognize the concept of urbanization with special reference to Maharashtra and India.
5. Understand the types and factors affecting agriculture and recognize the problems of Indian agriculture.

Detailed Syllabus:

Unit I: Introduction to Human Geography (12)

- a. Definitions of Human Geography
- b. Nature and Scope of Human Geography
- c. Branches of Human Geography
- d. Importance of Human Geography

Unit II: Population (12)

- a. Factors affecting on distribution and density of the population
- b. Concepts of Birth Rate, Death Rate, Growth Rate and Migration
- c. Demographic Transition Theory
- d. Composition of Indian Population: Age, Gender and Literacy

Unit III: Settlements (10)

- a. Types and Patterns of Rural Settlements
- b. Concept of Urbanization
- c. Urbanization in India and Maharashtra

Unit IV: Agriculture (11)

- a. Type of Agriculture
- b. Factors Affecting on Agriculture
- c. Problems of Indian Agriculture

Suggested Readings/Material:

1. Bhende & Kanitkar (2011): Principles of Population studies, Himalaya Publishing House.
2. Chandana R.C. (1988): Geography of Population, Kalyani Pub. Ludhiana.
3. Chandna, R.C. (2010): Population Geography, Kalyani Publisher.
4. Daniel, P.A. and Hopkinson, M.F. (1989): The Geography of Settlement, Oliver & Boyd, London.
5. Ghosh B.N. (1985): Fundamentals of Population Geography, Sterling Publishers.
6. Hassan Mohammad, (2005): Population Geography, Rawat Publication.
7. Hassan, M.I. (2005): Population Geography, Rawat Publications, Jaipur.
8. Hussain M. (2018): Human Geography, Rawat Publication.

9. Johnston R; Gregory D, Pratt G. et al. (2008): The Dictionary of Human Geography, Blackwell Publication.
10. Jordan-Bychkov et al. (2006): The Human Mosaic: A Thematic Introduction to Cultural Geography. W. H. Freeman and Company, New York.
11. Jyotiram More and Musmade Arjun, (2015): Regional Geography of India. Diamond Publication Pune.
12. Kaushik, S.D. (2010): Manavi Bhugol, Rastogi Publication, Meerut.
13. Maurya, S.D. (2012): Manavi Bhugol, Sharda Pustak Bhawan. Allahabad.
14. Mishra & Puri (2004): Indian Economy, Himalaya Publishing House.
15. Money D.C. (1968): Introduction to Human Geography, HarperCollins Distribution
16. Musmade Arjun, Sonawane Amit and Jyotiram More, (2015): Population & Settlement Geography, Diamond Publication Pune.
17. Perillouav (1986): Human Geography.
18. Perpillou A.V. (1986): Human Geography, Longman, London.
19. Robinson H. (1978): Human Geography, Macdonald & Evans Ltd.
20. S. Mukherjee (1996): Understanding Physical Geography through Diagrams, Orient Black swan (Pvt) Ltd.
21. Sawant S.B. and Athavale A. S. (1994): Population Geography, Mehta publishing house, Pune.
22. Singh, Gopal (1999): Mapwork & Practical Geography.
23. Singh, R.Y. (1998): Geography of Settlement.
24. Sudeepta Adhikari (2016): Orient Black swan PVT, New Delhi.
25. Sumitra Ghosh (2015): Introduction of Settlement Geography. Orient Black swan PVT Kolkata.
26. मोरे, पगार आणि थोरात (२०१९): प्राकृतिक भूगोल व मानवी भूगोल, प्रशांत प्रकाशन, जळगाव.
27. चव्हाण, साळुंके, नजन, सोनवणे आणि मंडलिक (२०१९): प्राकृतिक भूगोल व मानवी भूगोल, प्रशांत प्रकाशन, जळगाव.
28. सवदी आणि कार्लेकर (२०१९): मानवी भूगोल निराली प्रकाशन, पुणे.

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B. A. Geography (Major)

Title of the Course: Basics of Surveying and Map Projection								
Year: I				Semester: II				
Course Type	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CIE	ESE	Total
SEC-2	BA-GO123P	00	02	02	60	15	35	50

Learning Objectives:

1. To understand the meaning, types and importance of surveying.
2. To make students well aware of basic methods of surveying.
3. To know about advanced surveying methods.
4. To understand map projection, their types and uses.

Course Outcomes (COs):

After completion of this course students will

1. Understand the meaning, types and importance of surveying.
2. Well aware of basic methods of surveying.
3. Know about advanced surveying methods.
4. Understand map projection, their types and uses.

Detailed Syllabus:

Unit I: Basics of Surveying (15)

- a. Definitions of Surveying
- b. Types of Surveying
- c. Importance of Surveying
- d. Concept of Datum

Unit II: Methods of Surveying (30)

- a. Plane table survey: Basics Concepts, Instruments and Methods
- b. Prismatic Compass Survey: Basics Concepts, Instruments and Methods

- c. Dumpy level survey: Basics Concepts, Instruments and Methods
- c. Introduction to Advanced Surveying Techniques: Total Station, GPS, dGPS, Drone Survey

Unit III: Map Projection

(15)

- a. Definitions of Map Projection
- b. Classification of Map Projection
- c. Choice and use of Map Projection

Suggested Readings/Material:

1. Sharma J. P., 2010, Prayogic Bhugol, Rastogi Publishers, Meerut.
2. Singh R. L. and Singh R. P. B., 1999, Elements of Practical Geography, Kalyani Publishers.
3. Slocum T. A., McMaster R. B. and Kessler F. C., 2008, Thematic Cartography and Geovisualization (3rd Edition), Prentice Hall.
4. Tyner J. A., 2010, Principles of Map Design, The Guilford Press.
5. Sarkar A., 2015, Practical Geography: A Systematic Approach, Orient Black Swan Private Ltd., New Delhi
6. Singh R. L. and Dutta P. K., 2012, Prayogatama Bhugol, Central Book Depot, Allahabad
7. Ahirrao Y., Karanjkehele E. K., 2002, Practical Geography, Sudarshan Publication, Nashik
8. Saptarshi P. G., Jog S. R., Statistical Methods
9. Karlekar S. N., 2008, Statistical Methods, Diamond Publication, Pune
10. Kanetkar T. P., Kulkarni S. V., 1986, Surveying and Leveling, Pune Vidyarthi Griha Publication, Pune
11. Kumbhare A., Practical Geography, Sumeru publication, Dombivali.
12. Saha P., Basu P., 2007, Advanced Practical Geography, Books and Allied (P) Ltd, Kolkata
13. Saha P., Basu P., Advanced Practical Geography: 2007, Books and Allied (P) Ltd, Kolkata
14. V. J. Patil and A. P. Chaudhari, 2016 Pratyakshik Bhugol, Prashant Publication

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B. A. Geography (Major)

Title of the Course: Surveying I								
Year: I					Semester: II			
Course Type	Course Code	Credit Distribution		Credits	Allotted Hours	Allotted Marks		
		Theory	Practical			CIE	ESE	Total
VSC-1	BA-GO124P	00	02	02	60	15	35	50

Learning Objectives:

1. To understand types of north direction.
2. To make students able to conduct a Plane Table survey.
3. To make students able to conduct a Prismatic Compass survey.
4. To know the definition, components and applications of GPS.
5. To make students able to Plot an area on a graph with the help of Latitude and Longitudes.

Course Outcomes (COs):

1. Understand the types of north directions.
2. Able to conduct a Plane Table survey.
3. Able to conduct a Prismatic Compass survey.
4. Know the definition, components and applications of GPS.
5. Able to Plot an area on a graph with the help of latitude and longitude.

Detailed Syllabus:

Unit I: Plane Table Survey (20)

- a. Types of North Direction: True, Magnetic and Grid North
- b. Plane Table Survey: Radiation Method and Intersection Method
- c. Measurement of Survey Field

Unit II: Prismatic Compass Survey (25)

- a. Structure and Functions of Prismatic Compass
- b. Open Traverse Method

- c. Closed Traverse Method
- d. Correction of Bearing by Bowditch Method

Unit III: GPS Survey

(15)

- a. GPS: Introduction, Definition and Components
- b. Applications of GPS
- c. GPS Survey: Plotting of area on a graph with the help of latitude and longitude

Suggested Readings/Material:

1. Kanetkar T.P. and Kulkarni S.V. (1983). Surveying and Levelling (Part I and II), Vidyarthi Gruha Prakashan, Pune.
2. Monkhouse, F.X.J. & Wilkinson, H.R. (1989). Maps & Diagrams, B.I Publications, Bombay.
3. Mishra, R.P, and Ramesh A. (2000). Fundamental of Cartography, Concept Publishing Company, New Delhi.
4. Robinson, A.H. & Sleep, R.D. (1969). Elements of Practical Geography, John Wiley publications, New York.
5. Singh Gopal (1996). Map Work and Practical Geography, Vikas Publishing House Pvt. Ltd., New Delhi.
6. Singh, R.C., and Dutta (1993). Elements of Practical Geography, Kalyani Publications, New Delhi.
7. Singh, Lekhraj & Singh R. (1973). Map work and Practical, Central Book Depot. Allahabad.
8. Singh, R.L., and Singh, R.P.B. (1997). Elements of Practical Geography, Kalyani Publishers, New Delhi.
9. Singh, R.L., and Kanaujia L.R.S. (1963). Map Work and Practical Geography, Central Book Depot, Allahabad.
10. Bygott, J. (1955). Map work and Practical Geography.5th Edition, University Tutorial Press, London.
11. Davis, R.E.and Foote, F.S. (1953). Surveying, McGraw-Hill Book Co., New York.
12. Deshpande, G.B.(1991). Surveying, Everest Publishing House, Pune
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