

Course Code	UA03CGEO51	Title of the Course	Climatology
Total Credits of the Course	04	Hours per Week	04

Course1. This paper on physical geography is structured into compone climatology. The aspects of climatology emphasize the constituents atmosphere, the dynamic nature of the processes associated with it an contribution in making the earth habitable. 2. Course content also leads to the identification of climatic differentiati On the earth, and the consequences of human activities on the atmosphere processes.	of the d their
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Cours	Course Content		
Unit	Description	Weightage%	
1.	Atmospheric Composition and Structure Variation with Altitude, Latitude and Season.	25%	
2.	Insulation and Temperature, Factors and Distribution Heat Budget, Temperature Inversion.	25%	
3.	Atmospheric Pressure, Winds – Planetary Winds, Forces affecting Winds, General Circulation, Jet Streams and Al-Nino	25%	
4.	Atmospheric Moisture – Evaporation, Humidity, Condensation, Fog and Clouds Precipitation Types, Stability and Instability; Climatic, Regions of the world Cyclones – Tropical Cyclones, Extra Tropical Cyclones, Monsoon - Origin and Mechanism	25%	

Teaching-Learning Methodology	ICT, Group Discussion Lecture method, Class room Seminar, quiz
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SARDAR PATEL UNIVERSITY Vallabh Vidyanagar, Gujarat (Reaccredited with 'A' Grade by NAAC (CGPA 3.25) Syllabus with effect from the Academic Year 2022-2023

Evaluation Pattern		
Sr. No.	Details of the Evaluation	
1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Cou	Course Outcomes: Having completed this course, the learner will be able to		
1.	Understand the elements of weather and climate and its impacts at different scales.		
2.	Comprehend the climatic aspects and its bearing on planet earth.		
3.	Understand the oceanic process and availability of resources.		

Suggested References:			
Sr.	References		
1.	M. R. Shah and K.N. Jasani(2016) - Physical Geography, Uni. Granth Nirman Board, Ahmedabad (Gujarati)		
2.	Alan Strahler(2014) - Physical Geography, John Wiley and Sons		
3.	Savindra Singh (2018): Physical Geography, Pravalika Pub. Allahabad (Hindi, English)		
4.	Bryant, H. Richard (2001): Physical Geography Made Simple, Rupa and Company. New Delhi		
On-l	On-line resources to be used if available as reference material		
On-line Resources:			
https://web.iitd.ac.in/~arunku/files/CVL212_Y18/AtmosphericCompositionFateofpollutants.pdf https://www.nationalgeographic.org/encyclopedia/el-nino/ https://courses.lumenlearning.com/geophysical/chapter/cyclones/			





BACHELOR OF ARTS GEOGRAPHY

BA GEOGRAPHY Semester 03

Course Code	UA03CGEO52	Title of the Course	Regional Geography of India
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	 The course is aimed at presenting a comprehensive, integrated and empirically based profile of India. Besides, The objective is to highlight the linkages of systematic geography of India with the regional personality of the country.
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Course	Course Content		
Unit	Description	Weightage%	
1.	Location, Area, Size ,Political setup - India in the context of the world – Relationship of India with neighboring countries – Physical and Cultural diversity of India.	25%	
2.	Main Physiographical Division of India – structure, relief and its Significance, Drainage pattern - Major river systems of India and its significance, Multipurpose and hydro power projects in India.	25%	
3.	Mechanism of Indian monsoons and rainfall pattern – Factors affecting the Indian climate – Climatic regions- Impact of Indian climate on economic activities - Floods and droughts in India.	25%	
4.	Major soil types, Classification and their regional distribution – soil erosion and degradation in India – Conservation of soil resource in India. Natural vegetation – types – distribution - Major forest products and its economic significance. Wild life resources and their conservation. Problems of deforestation and conservation of Natural vegetation – Social forestry – agro forestry.	25%	

Teaching-Learning ICT, Group Discussion Lecture method, Class room Sem Methodology		nar, quiz	
Evaluation Pattern			
Sr. No.	Details of the Evaluation We		Weightage
1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)		15%





SARDAR PATEL UNIVERSITY Vallabh Vidyanagar, Gujarat (Reaccredited with 'A' Grade by NAAC (CGPA 3.25) Syllabus with effect from the Academic Year 2022-2023

2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Cou	Course Outcomes: Having completed this course, the learner will be able to		
1.	Understand the physical profile of the country.		
2.	Study the resource endowment and its spatial distribution and utilization for sustainable development.		
3.	Synthesize and develop the idea of regional dimensions.		

Suggested References:			
Sr.	References		
1.	Pathak, Y.P. & Rangiya , J .(2018): <i>Bharat Ni Bhugol</i> (In Gujarati), University Granth Nirman Board, Ahmedabad (Gujarati)		
2.	Singh, Jagdish 2003: India - A Comprehensive & Systematic Geography, Gyanodaya Prakashan, Gorakhpur.		
3.	R. C. Chandra (1986): Regional Geography of India, Kalyani pub. Delhi.		
4.	Deshpande C. D., 1992: India: A Regional Interpretation, ICSSR, and New Delhi.		
5.	Singh R. L., 1971: India: A Regional Geography, National Geographical Society of India.		
On-J	n-line resources to be used if available as reference material		
On-line Resources: https://en.wikipedia.org/wiki/Geography_of_India https://en.wikipedia.org/wiki/Climate_of_India https://www.thrillophilia.com/wildlife-india			





Course Code	UA03CGEO53	Title of the Course	Principals of Cartography. (Theory)
Total Credits of the Course	04	Hours per Week	04

Objectives:	 Geography is an amalgam of physical as well as social sciences and as Such, it is necessary for the students to go through laboratory exercises. Particularly the techniques of drawing cartograms Showing physical, Climatic and socio-economic attributes of a region.
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Course Content				
Unit	Description	Weightage%		
1.	Historical Development of Cartography till modern period, Artistic and Scientific bases of Cartography. Cartography as a Science of human communication – Branches of Cartography, Recent trends in Cartography, Use of Computer and GIS in Cartography.	25%		
2.	History of Maps - Types of maps - Classification of maps Based scale and purpose. Use of maps, Components of Map: Scale, Map Projection, Conversational Sign, Map making in India, Brief History of Survey of India. Various Methods of showing relief: Hachure's, Shading, layer tints, contours, bench, mark, spot height and trig point, Their Merits and Demerits.	25%		
3.	Weather instruments, uses and the data collected from them. Significance of weather maps, Weather Symbols, Major Activities of Indian Meteorological Department. Forecasting of weather, Recent Trends in weather forecasting use of satellites, remote sensing data, and use of computer in weather measurement and forecasting.	25%		
4.	Importance of Fieldwork and laboratory work in Geography, The Different Approaches to Fieldwork. Design and Methodology of Field Work, Advantages of fieldwork, Collection of Information and data.	25%		

Teaching-Learning	ICT, Group Discussion Lecture method, Class room Seminar, quiz
Methodology	





Evaluation Pattern			
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1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)	15%	
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%	
3.	University Examination	70%	

Cou	Course Outcomes: Having completed this course, the learner will be able to		
1.	Read and prepare maps.		
2.	Comprehend locational and spatial aspects of the earth surface.		
3.	Use and importance of maps for regional development and decision making.		

Suggested References:				
Sr.	r. References			
1.	Dixit, N.G. (2016) "NAKSHA VIGYAN -1" (IN GUJARATI) University Granth Nirman Bhavan, Ahmedabad.			
2.	Singh, R.L. and Dutt, P.K. (1968) Elements of Practical Geography, Students Friends, Allahabad.			
3.	Gopal Singh, (1996) Map Work and Practical Geography, Vikas Publishing House, New Delhi			
4.	Misra, R.P. and Ramesh, A (1999) Fundamental of Cartography, McMillan, New Delhi.			
On-l	On-line resources to be used if available as reference material			
On-line Resources: https://www.thoughtco.com/the-history-of-cartography-1435696 https://www.rgs.org/RGS/media/RGS-Media- Library/In% 20the% 20field/Fieldwork% 20in% 20schools/Fieldw_VC1.pdf https://www.ceinsys.com/blog/applications-of-satellite-imagery-remote-sensing-data/				





Course Code	UA03GGEO51	Title of the Course	Climatology
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	 This paper on physical geography is structured into components of climatology. The aspects of climatology emphasize the constituents of the atmosphere, the dynamic nature of the processes associated with it and their contribution in making the earth habitable. Course content also leads to the identification of climatic differentiation On the earth, and the consequences of human activities on the atmospheric processes.
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Course	Course Content			
Unit	Description	Weightage%		
1.	Atmospheric Composition and Structure Variation with Altitude, Latitude and Season.	25%		
2.	Insulation and Temperature, Factors and Distribution Heat Budget, Temperature Inversion.	25%		
3.	Atmospheric Pressure, Winds – Planetary Winds, Forces affecting Winds, General Circulation, Jet Streams and Al-Nino	25%		
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Teaching-Learning Methodology	ICT, Group Discussion Lecture method, Class room Seminar, quiz





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3.	University Examination	70%	

Cot	Course Outcomes: Having completed this course, the learner will be able to		
1.	Understand the elements of weather and climate and its impacts at different scales.		
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https <u>https</u>	On-line Resources: https://web.iitd.ac.in/~arunku/files/CVL212_Y18/AtmosphericCompositionFateofpollutants.pdf https://www.nationalgeographic.org/encyclopedia/el-nino/ https://courses.lumenlearning.com/geophysical/chapter/cyclones/			





Course Code	UA03GGEO52	Title of the Course	Regional Geography of India
Total Credits of the Course	04	Hours per Week	04
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-	2. The objective is to highlight the linkages of systematic geography of India
	with the regional personality of the country.

Course	Course Content			
Unit	nit Description			
1.	Location, Area, Size ,Political setup - India in the context of the world – Relationship of India with neighboring countries – Physical and Cultural diversity of India.	25%		
2.	Main Physiographical Division of India – structure, relief and its Significance, Drainage pattern - Major river systems of India and its significance, Multipurpose and hydro power projects in India.	25%		
3.	Mechanism of Indian monsoons and rainfall pattern – Factors affecting the Indian climate – Climatic regions- Impact of Indian climate on economic activities - Floods and droughts in India.	25%		
4.	Major soil types, Classification and their regional distribution – soil erosion and degradation in India – Conservation of soil resource in India. Natural vegetation – types – distribution - Major forest products and its economic significance. Wild life resources and their conservation. Problems of deforestation and conservation of Natural vegetation – Social forestry – agro forestry.	25%		

Teaching-Learning Methodology	ICT, Group Discussion Lecture method, Class room Seminar, quiz
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Evaluation Pattern				
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1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)	15%		
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%		
3.	University Examination	70%		

Cou	Course Outcomes: Having completed this course, the learner will be able to		
1.	Understand the physical profile of the country.		
2.	2. Study the resource endowment and its spatial distribution and utilization for sustainable development.		
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2.	Singh, Jagdish 2003: India - A Comprehensive & Systematic Geography, Gyanodaya Prakashan, Gorakhpur.			
3.	R. C. Chandra (1986): Regional Geography of India, Kalyani pub. Delhi.			
4.	Deshpande C. D., 1992: India: A Regional Interpretation, ICSSR, and New Delhi.			
5.	Singh R. L., 1971: India: A Regional Geography, National Geographical Society of India.			
On-line resources to be used if available as reference material				
On-line Resources: <u>https://en.wikipedia.org/wiki/Geography_of_India</u> <u>https://en.wikipedia.org/wiki/Climate_of_India</u> https://www.thrillophilia.com/wildlife-india				





Course Code	UA03SGEO51	Title of the Course	Resource Geography-I
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	 understand concepts and approaches of natural resource management examine use and misuse of various resources and to analyse future prospects, to study various methods and approaches of conservation and Management of natural Resources.
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Course Content		
Unit	Description	Weightage%
1.	Meaning, Types and Classification of resources, Renewable and non- renewable resources, Natural resources and associated problems.	25%
2.	Forest resources: Use and over-exploitation, deforestation. Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems.	25%
3.	Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity. Mineral resources: Use and exploitation, environmental effects of extracting and Using mineral resources.	25%
4.	Energy resources: Growing energy needs, renewable and non renewable energy sources, use of alternate energy sources. Land resources: Land as a resource, land degradation, man induced landslides, soil erosion and desertification.	25%

Teaching-Learning Methodology	ICT, Group Discussion Lecture method, Class room Seminar, quiz
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Evaluation	Evaluation Pattern	
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)	15%





SARDAR PATEL UNIVERSITY Vallabh Vidyanagar, Gujarat (Reaccredited with 'A' Grade by NAAC (CGPA 3.25) Syllabus with effect from the Academic Year 2022-2023

2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	50%

Cou	ourse Outcomes: Having completed this course, the learner will be able to	
1.	Understand the dynamic interactive relationship between man and environment.	
2.	Have sound understanding on distribution, utilization and proper management of natural resources at global level.	
3.	Make assessment and review of planning and policies related to environment and natural resources.	

Suggested References:	
Sr.	References
1.	Dr. N. G. Dixit,(2015): Man And Environment. Arunoday Prakashan, Ahmedabad
2.	Savindra Singh, (2000): Environmental Geography. Prayag Pustak Bhavan, Allahabad
3.	S. D. Kaushik,(2004) (Sansadhan Bhugol), Rastogi publication, Merath, Delhi. (Hindi)
4.	Dr. B. C. Jat,(2001)(Economic & Resource Geography), Prayag Pustak Bhavan, Allahabad
On-line resources to be used if available as reference material	
On-line Resources: <u>https://www.nationalgeographic.org/encyclopedia/renewable-resources/</u> <u>https://www.encyclopedia.com/environment/energy-government-and-defense-magazines/forest-resources</u> https://www.tulane.edu/~sanelson/eens1110/energy.htm	

