

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

 atmosphere, the dynamic nature of the processes associated with it and their contribution in making the earth habitable. 2. Course content also leads to the identification of climatic differentiation On the earth, and the consequences of human activities on the atmospheric processes. 	Course Objectives:	2. Course content also leads to the identification of climatic differentiation On the earth, and the consequences of human activities on the atmospheric
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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-LearningICT, Group Discussion Lecture method, Class room Seminar, quizMethodologyICT, Group Discussion Lecture method, Class room Seminar, quiz
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
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-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 MethodologyICT, Group Discussion Lecture method, Class room		ICT, Group Discussion Lecture method, Class room Semi	nar, quiz
Evaluation Pattern			
Sr. No.	Details of the Evaluation		Weightage
1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)		15%





	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	arse 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.		Study the resource endowment and its spatial distribution and utilization for sustainable development.		
3. Synthesize and develop the idea of regional dimensions.		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-	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	UA03CGEO53	Title of the Course	Principals of Cartography. (Theory)
Total Credits of the Course	04	Hours per Week	04

Course 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			
Sr. No.	Details of the Evaluation	Weightage	
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.	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. 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, A				
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	ine 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%			
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 ICT, O Methodology	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%	
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.	2. Comprehend the climatic aspects and its bearing on planet earth.		
3.	Understand the oceanic process and availability of resources.		

Suggested References:				
Sr.	Sr. References			
1.	1. M. R. Shah and K.N. Jasani(2016) - Physical Geography, Uni. Granth Nirman Board, Ahmedabad (Gujarati)			
2.	2. Alan Strahler(2014) - Physical Geography, John Wiley and Sons			
3.	3. Savindra Singh (2018): Physical Geography, Pravalika Pub. Allahabad (Hindi, English)			
5.	5. Bryant, H. Richard (2001): Physical Geography Made Simple, Rupa and Company. New Delhi			
On-line resources to be used if available as reference material				
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 CodeUA03GGEO52Title of the CourseRegional Geography of India				
Total Credits of the Course	04	Hours per Week	04	
Course1. The course is aimed at presenting a comprehensive, integrated and empirically based profile of India. Besides,2. The objective is to bighlight the linkages of systematic geography of India				

	2. 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 Methodology	ICT, Group Discussion Lecture method, Class room Seminar, quiz
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Evaluation Pattern			
Sr. No.	Details of the Evaluation	Weightage	
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	arse 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.	Sr. References				
1.	1. Pathak, Y.P. & Rangiya , J .(2018): <i>Bharat Ni Bhugol</i> (In Gujarati), University Granth Nirman Board, Ahmedabad (Gujarati)				
2.	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.	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: https://en.wikipedia.org/wiki/Geography_of_India https://en.wikipedia.org/wiki/Climate_of_India 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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Cours	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 Pattern		
Sr. No.	Details of the Evaluation	Weightage
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	50%

Cou	Course 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.	

Sugg	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			





Proposed Syllabus to be implementing from 2022-23

Second Year B.A. Semester -III /IV

					Con	nponent of N	Marks
Course Tures	Course Code	Name of Course	Credit	Exam Duration in hrs	Internal	External	Total
Course Type					Total/ Passing	Total/ Passing	Total/ Passing
	UA03CGEO51	Climatology	4	3	30/08	70/28	100/40
Core Subject	UA03CGEO52	Regional Geography of India	4	3	30/08	70/28	100/40
	UA03CGEO53	Cartographic Techniques (Theory)	4	3	30/08	70/28	100/40
Generic Elective	UA03GGEO51	Climatology	4	3	30/08	70/28	100/40
	UA03GGEO52	Regional Geography of India	4	3	30/08	70/28	100/40
Skill Enhancement	UA03SGEO51	Resource Geography-I	2	1.5	-	50/20	50/20





Course Code	UA03CGEO51	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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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	ICT, Group Discussion Lecture method, Class room Seminar, quiz
Methodology	

Evaluation Pattern				
Sr. No.	Details of the Evaluation Weightage			
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%		

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.	

Sug	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-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/





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.			

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

Sug	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-	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			





BACHELOR OF ARTS GEOGRAPHY

SYBA GEOGRAPHY Semester 03

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

Course 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	it Description	
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%

0 0	ICT, Group Discussion Lecture method, Class room Seminar, quiz
Methodology	





Evaluation	Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage	
1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)	15%	
2.	2. Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)		
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.	References	
1.	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: <u>https://www.thoughtco.com/the-history-of-cartography-1435696</u> <u>https://www.rgs.org/RGS/media/RGS-Media-</u> <u>Library/In%20the%20field/Fieldwork%20in%20schools/Fieldw_VC1.pdf</u> 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%	
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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Evaluation	Evaluation Pattern	
Sr. No.	Details of the Evaluation V	
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%

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.	

Sug	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)	
5.	Bryant, H. Richard (2001): Physical Geography Made Simple, Rupa and Company. New Delhi	
On-J	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/		





Course Code	UA03GGEO52	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.	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.		
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
Evaluation Pattern	





Sr. No.	Details of the Evaluation	Weightage
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%

 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.

r			
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-	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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Cours	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
65	

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage





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.	3. University Examination	

Cou	Course 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.		

Sug	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: https://www.nationalgeographic.org/encyclopedia/renewable-resources/				
https://www.encyclopedia.com/environment/energy-government-and-defense-magazines/forest-resources					
https	://www.tulane.edu/~sanelson/eens1110/energy.htm				





Proposed Syllabus to be implementing from 2022-23

Second Year B.A. Semester -IV

	Course Code Name of Course			Component of Marks			
Course Ture		Name of Course	Credit	Exam Duration in hrs	Internal	External	Total
Course Type					Total/ Passing	Total/ Passing	Total/ Passing
	UA04CGEO51	Oceanography	4	3	30/08	70/28	100/40
Core Subject	UA04CGEO52	Human Geography of India	4	3	30/08	70/28	100/40
	UA04CGEO53	Thematic Cartography (Practical)	4	3	30/08	70/28	100/40
Generic Elective	UA04GGEO51	Oceanography	4	3	30/08	70/28	100/40
	UA04GGEO52	Human Geography of India	4	3	30/08	70/28	100/40
Skill Enhancement	UA02SGEO51	Resource Geography-II	2	1.5	-	50/20	50/20





Course Code	UA04CGEO51	Title of the Course	Oceanography
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	 The objectives of the course are to introduce students to the many facets of Oceans, such as, evolution of the oceans, physical and chemical properties of Sea water. Atmospheric and oceanographic circulation, the fascinating world of marine life and the characteristic of marine Environment and the impact of man on the marine environment.
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Cours	Course Content				
Unit	Description	Weightage%			
1.	Meaning of Oceanography, Concept of Hydrological Cycle Distribution of Land and Water. Tetrahedral theory, Sea floor Spreading theory.	25%			
2.	Hypsographic Curve and Ocean Floor Topography, Surface Bottom Relief, Pacific Ocean, Atlantic Ocean, Arctic Ocean & Indian Ocean.	25%			
3.	Coral reefs and atolls, Theories of Origin of Coral reefs, Physical & Chemical Properties of Sea Water, Ocean Salinity and Temperature – Distribution and Determinants.	25%			
4.	Ocean Current: Cause, Types, Currents of Pacific, Atlantic & Indian Ocean, Effects of Ocean Currents. Ocean Deposits: Types & Distribution. Ocean Resources - biotic and minerals.	25%			

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

Evaluation	Evaluation Pattern				
Sr. No.	Sr. No. Details of the Evaluation Weightage				
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.		

Sug	Suggested References:			
Sr.	References			
1.	M. R. Shah and K.N. Jasani(2016) - Physical Geography, Uni. Granth Nirman Board, Ahmedabad (Gujarati)			
2.	Alan Strahler - Physical Geography, John Wiley and Sons			
3.	Savindra Singh (2018): Physical Geography, Pravalika Pub. Allahabad (Hindi, English)			
4.	K.N. Jasani(2016) -: Oceanography, Uni. Granth Nirman Board, Ahmedabad. (Gujarati)			
On-	On-line resources to be used if available as reference material			
https	On-line Resources: <u>https://www.sciencedirect.com/topics/earth-and-planetary-sciences/hydrological-cycle</u> <u>https://www.nationalgeographic.org/encyclopedia/seafloor-spreading/</u> https://www.leisurepro.com/blog/explore-the-blue/types-coral-indian-ocean/			





Course Code	UA04CGEO52	Title of the Course	Human Geography of India
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	 Various dimensions of the geographical features of India and their spatial Distribution. Detailed analysis of economic resources of India, Understanding of regional Divisions of India.
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Course	Course Content		
Unit	Description	Weightage%	
1.	Geographical advantages of India and its contribution in Indian economy, Minerals and power resources - Ironore, manganese and bauxite - Coal, Petroleum, Natural Gas -Hydro, Thermal, Atomic power projects.	25%	
2.	Significance of agriculture in Indian Economy - Salient features of Indian Agriculture -Problems of Indian Agriculture- Green Revolution, White revolution & Blue revolution.	25%	
3.	Industrial regions and Major industries of India-Location factors, development and distribution of iron, steel and cotton industries.	25%	
4.	Racial and ethnic diversities - Major tribes – Language – Religion in India. Growth & distribution of population - Composition of population -Rural – Urban migration -Urbanization and related problems. Network of roads, railways, waterways, airways and pipelines: their complementary role in regional development - Growing importance of ports in national and foreign trade. Trade balance - Developments in communication technology.	25%	

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





Sr. No.	Details of the Evaluation	Weightage
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%

Co	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.	3. Synthesize and develop the idea of regional dimensions.		

Sug	Suggested References:		
Sr.	References		
1.	Prof. Y. P. Pathak, Dr. J. G. Rangiya,(2014) Gujarat Granth Nirman board, Ahmedabad. (Gujarati)		
2.	Alka Gautam (2009): Geography of India, Sharda Publication, Allahabad.		
3.	R. C. Chandra (1986): Regional Geography of India, Kalyani pub. Delhi.		
4.	Sharma and Coutinho (1980) Economics and Commercial Geography of India, Vikas Publication, New Delhi.		
On-	line resources to be used if available as reference material		
https	line Resources: <u>https://en.wikipedia.org/wiki/Economy_of_India</u> :://en.wikipedia.org/wiki/Green_Revolution_in_India :://www.patnauniversity.ac.in/e-content/social_sciences/geography/MAGeog20.pdf		





BACHELOR OF ARTS GEOGRAPHY

SYBA GEOGRAPHY Semester 03

Course Code	UA04CGEO53	Title of the Course	Thematic Cartography (Practical)
Total Credits of the Course	04	Hours per Week	04
Course Objectives:	demographic and techniques and car 2. The techniques geographical posit of the practical ex	Socio-economic tograms. of surveying and tioning and preparent ercises.	e to train the students in the art of representing database of any area through simple statistical d map projections necessary for accurate aring physical plans of an area also form parts ents in preparing different types of maps.

Course Content		
Unit	Description	Weightage%
1.	Conversion of Scale: R.F. To verbal and Verbal to R.F. Construction of scale Simple, Time and Distance scale	25%
2.	Representation of different landforms by contours Slopes, Conical hill, Plateau, Ridge, Pass, Cliff, 'U' shaped valley, "V" shaped valley and ether Types. Construction of climatic diagrams, Line graph & polygraph, Simple and compound bar diagram, Wind Rose diagrams, Hythergraph, Climograph and ether.	25%
3.	Study and interpretation of January and July <i>Indian weather</i> maps in respect of temperature, pressure , wind direction , velocity , Cloud cover and precipitation. Study of Weather Instruments.	25%
4.	Enlargement and Reduction of Maps, Field Visit and Preparation of Report. Students to be taken on a field visit for one day to nearby areas. Main objectives of field visit are: To prepare contour plan by using Dumpy level. To measure height by using Abney level Indian clinometers To identify the landforms on the surface, - while in the field. (Also note the agents, of erosion, transportation and deposition associated With the landforms).	25%





Teaching-Learning Methodology		-	ICT, Group Discussion Lecture method, Class room Seminar, quiz		
Eval	uation	Pattern			
Sr. N	No. Details of the Evaluation Weightage			Weightage	
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%		70%	
Cou	Course Outcomes: Having completed this course, the learner will be able to				
1.	Read and prepare maps.				
2.	Com	Comprehend locational and spatial aspects of the earth surface.			
3.	Use and importance of maps for regional development and decision making.				

Sugg	Suggested References:		
Sr.	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	ine 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/			





Note:

1. Paper UA03CGEO53- Principals of Cartography (Theory) & Paper UA04CGEO53 Thematic Cartography (Practical) both are theory and a practical paper. Each one of the five units mentioned in the syllabus has a theoretical component and related practical sections.

2. The theory Component shall have 100 marks weight age (70 mark: external and 30 marks internal) in the final examination worth the duration of three hours. The practical component shall have 100 marks weight age (70 marks external including journal assessment (10 marks) and viva-voce examination (10 marks) and 30 marks internal) in final practical examination having 5 hours duration.

3. Number of students in a batch for a practical examination shall not have more than 15 under normal circumstance.

4. Students are required to keep a record of practical work in journal form duly signed by the teacher in-change on all exercises and certified by Head of the department and principal of the college.

5. Candidates who have not completed their journal work shall not be allowed to appear in the practical examination.

6. Students to be taken on a field visit for minimum one day to nearby- areas and have to submit field report.





BACHELOR OF ARTS GEOGRAPHY

SYBA GEOGRAPHY Semester 04

Course Code	UA04GGEO51	Title of the Course	Oceanography
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	 The objectives of the course are to introduce students to the many facets of Oceans, such as, evolution of the oceans, physical and chemical properties of Sea water. Atmospheric and oceanographic circulation, the fascinating world of marine life and the characteristic of marine Environment and the impact of man on the marine environment.
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Cours	Course Content		
Unit	Description	Weightage%	
1.	Meaning of Oceanography, Concept of Hydrological Cycle Distribution of Land and Water. Tetrahedral theory, Sea floor Spreading theory.	25%	
2.	Hypsographic Curve and Ocean Floor Topography, Surface Bottom Relief, Pacific Ocean, Atlantic Ocean, Arctic Ocean & Indian Ocean.	25%	
3.	Coral reefs and atolls, Theories of Origin of Coral reefs, Physical & Chemical Properties of Sea Water, Ocean Salinity and Temperature – Distribution and Determinants.	25%	
4.	Ocean Current: Cause, Types, Currents of Pacific, Atlantic & Indian Ocean, Effects of Ocean Currents. Ocean Deposits: Types & Distribution. Ocean Resources - biotic and minerals.	25%	

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

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage





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.	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 - Physical Geography, John Wiley and Sons
3.	Savindra Singh (2018): Physical Geography, Pravalika Pub. Allahabad (Hindi, English)
4.	K.N. Jasani(2016) -: Oceanography, Uni. Granth Nirman Board, Ahmedabad. (Gujarati)
On-l	ine resources to be used if available as reference material
On-line Resources: : <u>https://www.sciencedirect.com/topics/earth-and-planetary-sciences/hydrological-cycle</u> <u>https://www.nationalgeographic.org/encyclopedia/seafloor-spreading/</u> https://www.leisurepro.com/blog/explore-the-blue/types-coral-indian-ocean/	





Course Code	UA04GGEO52	Title of the Course	Human Geography of India
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	 Various dimensions of the geographical features of India and their spatial Distribution. Detailed analysis of economic resources of India, Understanding of regional Divisions of India.
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Course	Course Content		
Unit	Description	Weightage%	
1.	Geographical advantages of India and its contribution in Indian economy, Minerals and power resources - Ironore, manganese and bauxite - Coal, Petroleum, Natural Gas -Hydro, Thermal, Atomic power projects.	25%	
2.	Significance of agriculture in Indian Economy - Salient features of Indian Agriculture -Problems of Indian Agriculture- Green Revolution, White revolution & Blue revolution.	25%	
3.	Industrial regions and Major industries of India-Location factors, development and distribution of iron, steel and cotton industries.	25%	
4.	Racial and ethnic diversities - Major tribes – Language – Religion in India. Growth & distribution of population - Composition of population -Rural – Urban migration -Urbanization and related problems. Network of roads, railways, waterways, airways and pipelines: their complementary role in regional development - Growing importance of ports in national and foreign trade. Trade balance - Developments in communication technology.	25%	

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





Sr. No.	Details of the Evaluation	Weightage
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%

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

Suggested References:		
Sr.	References	
1.	Prof. Y. P. Pathak, Dr. J. G. Rangiya,(2014) Gujarat Granth Nirman board, Ahmedabad. (Gujarati)	
2.	Alka Gautam (2009): Geography of India, Sharda Publication, Allahabad.	
3.	R. C. Chandra (1986): Regional Geography of India, Kalyani pub. Delhi.	
4.	Sharma and Coutinho (1980) Economics and Commercial Geography of India, Vikas Publication, New Delhi.	
On-	line resources to be used if available as reference material	
On-line Resources: https://www.patnauniversity.ac.in/e-content/social_sciences/geography/MAGeog20.pdf https://en.wikipedia.org/wiki/Economy_of_India https://en.wikipedia.org/wiki/Green_Revolution_in_India		





Course Code	UA04SGEO51	Title of the Course	Resource Geography-II
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.	

Course Content		
Unit	Description	Weightage%
1.	Population growth - variation among nations, Population explosion and its impact on environment, Pollution Control Strategies Family Welfare Programme. Urbanization, Scarcity of Natural Resources; Water conservation, rain water harvesting, watershed management.	25%
2.	Green house effect, Global Warming & their Various Implications, Acid Rain & Ozone Depletion, Pollution: Air, Water, Land, Noise, Soil Degradation: Erosion, Desertification & Deforestation	25%
3.	Basic Principles of Environmental Planning. Environmental Perception and Public awareness. Impact of Pollutions on Human health. Solid waste Management: Causes, effects and control measures of Urban and industrial Wastes.	25%
4.	Control of Environmental degradation, Legislation on Water, Air, Noise Pollution with Special Reference to Gujarat. Environmental Impact Assessment (EIA) Environmental Protection related Organizations.	25%

0 0	ICT, Group Discussion Lecture method, Class room Seminar, quiz
Methodology	

Evaluation Pattern





Sr. No.	Details of the Evaluation	Weightage
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	50%

Cou	rse 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.

Sug	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-	On-line resources to be used if available as reference material	
On-	On-line Resources:	
https	https://www.yourarticlelibrary.com/family/family-welfare-programme-in-india/47666	
<u>https</u>	https://en.wikipedia.org/wiki/Greenhouse_effect	
https	https://www.nationalgeographic.org/encyclopedia/pollution/	

