BACHELOR OF ARTS GEOGRAPHY
SYBA GEOGRAPHY Semester 04

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

Course Objectives:	1. 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. 2. 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.

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 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 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 - 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-line resources to be used if available as reference material	
On-line Resources: https://www.sciencedirect.com/topics/earth-and-planetary-sciences/hydrological-cycle https://www.nationalgeographic.org/encyclopedia/seafloor-spreading/ https://www.leisurepro.com/blog/explore-the-blue/types-coral-indian-ocean/	

BACHELOR OF ARTS GEOGRAPHY
SYBA GEOGRAPHY Semester 04

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

Course Objectives:	1. Various dimensions of the geographical features of India and their spatial Distribution. 2. Detailed analysis of economic resources of India, Understanding of regional Divisions of India.

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

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.

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://en.wikipedia.org/wiki/Economy_of_India https://en.wikipedia.org/wiki/Green_Revolution_in_India https://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:	1. The objectives of this course are to train the students in the art of representing demographic and Socio-economic database of any area through simple statistical techniques and cartograms. 2. The techniques of surveying and map projections necessary for accurate geographical positioning and preparing physical plans of an area also form parts of the practical exercises. 3. This course thus trains the students 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** ***Indian weather*** **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

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.	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, 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-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/

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:	1. 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. 2. 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.

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 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 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.

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BACHELOR OF ARTS GEOGRAPHY
SYBA GEOGRAPHY Semester 04

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

Course Objectives:	1. Various dimensions of the geographical features of India and their spatial Distribution. 2. Detailed analysis of economic resources of India, Understanding of regional Divisions of India.

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

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.

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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.
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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	

BACHELOR OF ARTS GEOGRAPHY
SYBA GEOGRAPHY Semester 04

Course Code	UA04SGEO51	Title of the Course	Resource Geography-II
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	1. understand concepts and approaches of natural resource management 2. 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%

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	50%

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.

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.yourarticlelibrary.com/family/family-welfare-programme-in-india/47666 https://en.wikipedia.org/wiki/Greenhouse_effect https://www.nationalgeographic.org/encyclopedia/pollution/	