

SARDAR PATEL UNIVERSITY

B.COM. (BUSINESS STUDIES) SEMESTER-II		
COURSE CODE	TITLE OF THE PAPER	TOTAL CREDIT
IB02SCOM51	Climate Change and Sustainable Development	3

Course Objectives	The Course Intends To Introduce The Students To The Basic Concepts Of Environment, Sustainable Development, Different Environmental Issues, Ecosystem, Climate Change And Environment Management.
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Course Description		
Unit	Description	Weightage
1.	<p>CLIMATE CHANGE, GLOBAL WARMING, ACID RAIN, OZONE LAYER DEPLETION, NUCLEAR ACCIDENTS AND NUCLEAR HOLOCAUST.</p> <ul style="list-style-type: none"> • Climate Change • Global Warming • Acid Rain • Ozone Layer Depletion • Nuclear Accidents And Nuclear Holocaust • Wasteland Reclamation • Consumerism And Waste Products • Environment Protection Act • Air (Prevention And Control Of Pollution) Act • Water (Prevention And Control Of Pollution) Act • 2 Wildlife Protection Act • Forest Conservation Act <p>Issues Involved In Enforcement Of Environmental Legislation</p> <ul style="list-style-type: none"> • Environment Impact Assessment (EIA) • Citizens Actions And Action Groups <p>Public Awareness</p> <ul style="list-style-type: none"> • Using An Environmental Calendar Of Activities • What Can I Do? 	25%

2.	<p>ENVIRONMENTAL POLLUTION</p> <ul style="list-style-type: none"> • Definition <p>Causes, Effects And Control Measures Of</p> <ul style="list-style-type: none"> • Air Pollution • Water Pollution • Soil Pollution • Marine Pollution • Noise Pollution • Thermal Pollution • Nuclear Hazards <p>Solid Waste Management: Causes, Effects And Control Measures Of Urban And Industrial Waste</p> <ul style="list-style-type: none"> • Role Of Individuals In Pollution Prevention • Disaster Management: Floods, Earthquakes, Cyclones, Landslides 	25%
3.	<p>NATURAL RESOURCES</p> <ul style="list-style-type: none"> • Introduction • Renewable And Non-Renewable Resources • Natural Resources And Associated Problems • Non-Renewable Resources • Renewable Resources <ul style="list-style-type: none"> A. Forest Resources: Use And Over-Exploitation, Deforestation, Timber Extraction, Mining, Dams And Their Effects On Forests And Tribal People Water Resources: Use and Over-Utilization of Surface and Ground Water, Floods, Drought, Conflicts Over Water, Dams – Benefits And Problems. B. Mineral Resources: Use And Exploitation, Environmental Effects Of Extracting And Using Mineral Resources C. Food Resources: World Food Problems, Changes In Land Use By Agriculture And Grazing, Effects Of Modern Agriculture, Fertilizer/ Pesticide Problems, Water Logging And Salinity D. Energy Resources: Increasing Energy Needs, Renewable/ Non Renewable, Use Of Alternate Energy Sources E. Land Resources: Land as a Resource, Land Degradation, Man-Induced Land-Slides, Soil Erosion and Desertification. • Role Of Individual In Conservation Of Natural Resources • Equitable Use Of Resources For Sustainable Lifestyles 	25%

4.	<p>ECOSYSTEMS</p> <p>Concept Of An Ecosystem</p> <ul style="list-style-type: none"> • Understanding Ecosystems • Ecosystem Degradation • Resource Utilization <p>Structure And Functions Of An Ecosystem</p> <p>Producers, Consumers And Decomposers</p> <p>Energy Flow In The Ecosystem</p> <ul style="list-style-type: none"> • The Water Cycle • The Carbon Cycle • The Oxygen Cycle • The Nitrogen Cycle • The Energy Cycle • Integration Of Cycles In Nature <p>Ecological Succession</p> <p>Food Chains, Food Webs And Ecological Pyramids</p> <ul style="list-style-type: none"> • The Food Chains • The Food Webs • The Ecological Pyramids <p>Introduction, Types, Characteristic Features, Structure And Functions</p> <ul style="list-style-type: none"> • Forest Ecosystem • Grassland Ecosystem • Desert Ecosystem • Aquatic Ecosystems (Ponds, Lakes, Streams, Rivers, Estuaries, Oceans) 	25%
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*Units will have the same Weightage in the evaluation as suggested in the course outline.

Teaching-Learning Methodology	Direct Lecture, Power Point Presentations, Online lectures, Seminars, Students Presentation and Group Discussion.
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Evaluation Pattern		
Sr.No.	Details of the Evaluation	Weightage
1.	Internal/Written Examination	15%
2.	Internal Continuous Assessment in the form of Practical , Viva-Voce, Quizzes, Seminars, Assignments, Attendance	15%
3.	University Examination	70%

* Students will have to score a minimum of 40 (Forty) Percent to pass the course.

Course Outcomes: Having Completed this Course, the Students will be able to Understand/Analyze/and Learn	
1.	What Is Climate Change, Global Warming, Acid Rain, Ozone Layer Depletion, Nuclear Accidents And Nuclear Holocaust. What Are The Issues Involved In Enforcement Of Environmental Legislation And How Public Awareness Can Be Created?
2.	What Is Environmental Pollution, What Are The Causes, Effects And Control Measures Of Different Types Of Environmental Pollution And The Solid Waste Can Be Managed.
3.	What Are Different Types Of Natural Resources? What Is The Role Of Individual In Conservation Of Natural Resources And How Equitable Use Of Resources For Sustainable Lifestyles Can Be Made?
4.	What Is Ecosystems? What Is The Structure And Functions Of An Ecosystem? And What Is Ecological Succession Food Chains, Food Webs And Ecological Pyramids?

Suggested References: (include Reference Material from where a student is expected to study the said content in APA Style) Reference Websites can also be included)	
Sr. No.	References
1.	Bharucha Erach “Textbook For Environmental Studies” For Undergraduate Courses of all Branches of Higher Education Erach Bharucha For University Grants Commission Text – Erach Bharucha/ UGC, 2004.
On-Line Resources available that can be used as Reference Material	
SITE ADDRESS: https://ugcmoocs.inflibnet.ac.in/index.php/courses/moocs	
<ul style="list-style-type: none"> • https://ugcmoocs.inflibnet.ac.in/index.php/courses/view_pg/659 • https://ugcmoocs.inflibnet.ac.in/index.php/courses/view_pg/1109 • https://ugcmoocs.inflibnet.ac.in/index.php/courses/view_pg/843 	
SUBJECTS	
<ul style="list-style-type: none"> • Environmental Chemistry (Module 6,7,8,14,15,16,17,23,24,25) • Environmental Economics (Module 27,28,29,30,31,32,33,34,35,36) • Environmental Law (Module 5,8,9,10,11,13,14,15,16,18,19,20,21) 	