



ADD On (BASIC ENVIRONMENTAL SCIENCE)
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[ABILITY ENHANCEMENT COMPULSORY COURSE]

Semester: III	Credits: 2	Subject Code: ADBC32101	Lectures: 30
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Course Outcomes:

- At the end of this course, the learners will be able to,
- Identify and recognize the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment.
 - Discuss current scenario of environment.
 - Develop consciousness towards a cleaner and better managed environment.
 - Analyze various local environment aspects.

Unit 1: Environmental studies and Ecosphere	08
<ul style="list-style-type: none">• Introduction - Environmental studies Definition, scope importance and need for public awareness. (Multidisciplinary nature of environmental studies). <p>Ecosphere:</p> <ul style="list-style-type: none">• Atmosphere: Physico-chemical characteristics, division, composition & significance of components.• Hydrosphere: Water resource and water cycle, physico-chemical characteristics of aquatic environment.• Lithosphere: Composition, inorganic & organic components in soil, types of soil.• Biosphere: Composition of Biosphere and brief account of types of Biosphere.	

Unit 2: Environmental Pollution	08
<ul style="list-style-type: none">• Definition, Causes, effects on human, water, soil, air (Mother Earth)• Case studies: Air pollution, Water pollution and Soil pollution.• Marine pollution• Thermal pollution• Nuclear hazards	

Unit 3: Waste and Disaster Management	08
<ul style="list-style-type: none">• Solid waste Management: Causes, effects and control measures of urban and industrial wastes.• Electronic waste management in India• Disaster management: floods, earthquake, cyclone and landslides.	

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Chairperson (HoD)	Mrs Rekha Kankariya	

29/05/24

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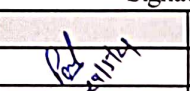
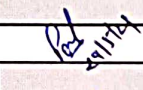
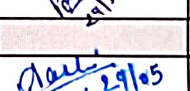
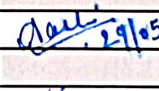
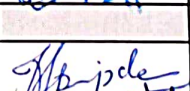
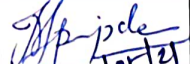


Unit 4: Field Work	06
<ul style="list-style-type: none">• Visit to a local area to document environmental assets - river / forest / grassland / hill / mountain.• Visit to a local polluted site-Urban/Rural/Industrial/Agricultural• Effects on plants, insects, birds – As Elements of ecosystem	

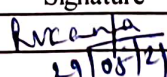
#12 hours for Library work, assignments, practical or field work

Reference Books:
<ul style="list-style-type: none">• Erach Bharucha ,<i>Environmental Science</i>, Orient Blackswan 2018.• Dr. D. N. Khairnar ,<i>Environmental Awareness</i>, Vision Publications,2006.• Dr. Kishore Pawar ,<i>A Textbook of Environmental Awareness</i> - Nirali Publications,2020.• P.D. Sharma,,<i>Economy and Environmental</i>, Rastogi publications, 2018.• Dr. R. G. Desai ,<i>Environmental Studies</i>, ,Himalaya Publishing House, 2014.• Dr D.D Misra,S.Chand ,<i>Environmental Studies</i>, ,Publications 2020.• Raven, P.H,Hassenzahl, D.M.,Hager, M.C, Gift, N.Y.,and Berg,L.R(2015), <i>Environment</i>, 9thEdition,Wiley Publishing house,USA

Recommended websites:-
<ul style="list-style-type: none">• https://en.wikipedia.org/wiki/Reference_ecosystem• www.ewaste1.com• https://www.sciencedirect.com/topics/earth-and-planetary-sciences/environmental-pollution

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