

ENVIRONMENTAL STUDIES

Sub Code	: 10CIV18/10CIV28	IA Marks	: 25
Hrs/ Week	: 02	Exam Hours	: 02
Total Hrs.	: 26	Exam Marks	: 50

PART - A

UNIT-1

Environment - Definition, Eco system -- Balanced ecosystem, Human activities - Food, Shelter, Economic and Social Security

3 Hours

UNIT-2

Effects of human activities on environment - Agriculture, Housing, Industry, Mining, and Transportation activities, Environmental Impact Assessment. Sustainable Development.

3 Hours

UNIT-3

Natural Resources - Water resources - Availability and Quality aspects. Water borne diseases, Water induced diseases, Fluoride problem in drinking water. Mineral Resources, Forest Wealth, Material Cycles - Carbon, Nitrogen and Sulphur Cycles.

4 Hours

UNIT-4

Energy - Different types of energy, Electro-magnetic radiation. Conventional and Non - Conventional sources - Hydro Electric, Fossil fuel based, Nuclear, Solar, Biomass and Bio-gas. Hydrogen as an alternative future source of Energy.

4 Hours

PART - B

UNIT-5

Environmental Pollution and their effects. Water pollution. Land pollution . Noise pollution . Public Health aspects.

3 Hours

UNIT-6

Current Environmental issues of importance:
Population Growth, Climate change and Global warming - Effects,
Urbanization, Automobile pollution

3 Hours

UNIT-7

Acid Rain, Ozone layer depletion, Animal Husbandry

3 Hours

UNIT-8

Environmental Protection - Role of Government, Legal aspects, Initiatives by Non - Governmental Organizations (NGO), Environmental Education, Women Education.

3 Hours

Question paper is of objective type for 50 marks (**Fifty questions have to be set with 4 multiple choice answers**). Students have to pass the subject compulsorily. However, marks will not be considered for awarding class/rank.

Text Books:

- 1) Benny Joseph (2005), "Environmental Studies", Tata McGraw - Hill Publishing Company Limited
- 2) Ranjit Daniels R.J. and Jagdish Kirshnaswamy, (2009), "Environmental Studies", Wiley India Private Ltd., New Delhi
- 3) Rajagopalan R. (2005), "Environmental Studies – From Crisis to Cure", Oxford University Press

Reference Books:

- 1) Raman Sivakumar, (2005), "Principles of Environmental Science and Engineering", Second Edition, Cengage learning, Singapore
- 2) Meenakshi P. (2006), "Elements of Environmental Science and Engineering", Prentice Hall of India Private Limited, New Delhi
- 3) Prakash S.M. (2007), "Environmental Studies", Elite Publishers, Mangalore
- 4) Erach Bharucha (2005), "Text Book of Environmental Studies", for UGC, University Press
- 5) Tyler Miller Jr. G. (2004), "Environmental Science – Working with the Earth", Tenth Edition, Thomson Brooks/Cole
- 6) Tyler Miller Jr. G. (2006), "Environmental Science – Working with the Earth", Eleventh Edition, Thomson Brooks/Cole
- 7) "Text Book of Environmental and Ecology" by Dr. Pratibha Sing, Dr. Anoop Singh and Dr. Piyush Malaviya. Acme Learning Pvt. Ltd., New Delhi.



H. O. D.
Dept. Of Physics
Alva's Institute of Engg. & Technology
Mijar, MOODBIDRI - 574 225