

# GUJARAT TECHNOLOGICAL UNIVERSITY

## B.E. SEMESTER : VIII

### ENVIRONMENT ENGINEERING

Subject Name: **ENVIRONMENTAL IMPACT ASSESSMENT**

Sr. No.	Course Contents	Total Hrs
1.	Sustainable Development: Development; Sustainable Development – Logic of Sustainable Development; Methods To Achieve Sustainable Development	6
2.	Concepts of Environmental Impact Assessment : Environment; Environmental Impacts; Environmental Impact Analysis; Environmental Impact Assessment And Environmental Impact Statement; EIA- As An Integral Part of The Planning Process	6
3.	Detailed Contents of EIA: Introduction; Project Description; Description of The Environment; Anticipated Environmental Impacts And Mitigation Measures: Analysis of Alternatives; Environmental Monitoring Programme; Additional studies; Project Benefits; Environmental Cost Benefit Analysis; EMP; Summary.	8
4.	Environment attributes: air; water; noise; socioeconomic; cultural & biological	8
5.	Description of The Environmental Setting : Purposes For Defining The Environmental Setting; Inclusion or Exclusion of Environmental Items; Some Suggested Approaches For Developing A List of Environmental Factors	6
6.	Prediction and Methods of Assessment of Impacts on Various Aspects of Environment	6
7.	Public participation in environmental decision making process.	4
8.	Eia notification September 2006 and amendments	4

#### Reference Books:

1. Environmental Impact Analysis Handbook – by Rau Whooten; McGraw Hill publications
2. Environmental Impact Assessment – by Larry Canter; McGraw Hill publications
3. Environmental Impact Analysis – A Decision Making Tool by R K Jain
4. Handbook of Environment Impact Assessment by Judith Petts; McGraw Hill publications

#### Tutorials:

1. Questions based on Sustainable Development.
2. Questions based on Detailed Contents of EIA
3. Questions based on Detailed Contents of EIA with specific project
4. Questions based on Environmental Attributes.
5. Questions based on Description of Environmental Setting.
6. Questions based on Prediction and Methods of Assessment of impacts
7. Questions based on EIA Notification.
8. Case studies related to Water; Air; Noise; Land; Socio Economic Impact.
9. Case studies on Environmental Audit.