

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. 2ND Semester Examination – June/July- 2011

Subject code: 1721801

Subject Name: Environmental Impact Assessment

Date: 22/06/2011

Time: 10:30 am – 01:00 pm

Total Marks: 70

Instructions:

- 1. Attempt all questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**

Q.1 (a) Define 'Sustainable Development'. Enlist the methods to achieve sustainable development. Explain 'Carrying Capacity based developmental planning' to achieve Sustainable Development **08**

(b) With the help of examples, give the classification of impacts based on: **06**

1. Acceptability.
2. Reversibility
3. Time period

Q.2 (a) What is baseline monitoring? Explain its importance in the process of EIA. **07**

(b) Differentiate between : **07**

- (1) EIA and EIS
- (2) Environmental Impact Analysis and Environmental Impact Assessment

OR

(b) Establish the relationship between human activities and environmental impact with the help of diagram. **07**

Q.3 (a) Briefly list down the detailed contents of EIA and explain each content. **07**

(b) Explain EIA as a four step activity. **07**

OR

Q.3 (a) Highlight the advantages and disadvantages of public involvement in the overall environmental clearance process for any project. **07**

(b) Explain the procedure to be followed for obtaining environmental clearance as per EIA Notification 2006. **07**

Q.4 (a) Explain the following EIA methodologies: **07**

1. Checklist method.
2. Networks method

(b) Write down the procedure to prepare value function graphs. Draw and explain typical value function graphs for pH and DO in water. What is significance of value function graphs in EIA? **07**

OR

- Q.4 (a)** Write short notes on: **07**
1. Beattle Columbus method.
2. Matrix method
- (b)** Define Environmental Attributes. Explain any one environmental attribute to describe water component of EIA. **07**
- Q.5 (a)** A high way construction project is to be initiated connecting two important cities. Enlist the probable environmental impacts of the project and classify them. **07**
- (b)** Express your views on the need of EIA for developing countries. **07**
- OR**
- Q.5 (a)** A chemical industry is to be established on the banks of a perennial river. Prepare an impact identification matrix for the project. **07**
- (b)** Explain the difference between environmental effects and impacts with appropriate example **07**
