

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
M. E. - SEMESTER – II • EXAMINATION – SUMMER • 2014

Subject code: 1721801

Date: 16-06-2014

Subject Name: Environmental Impact Assessment

Time: 02:30 pm - 05:00 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)** Explain the concept of Strategic Environmental Assessment (SEA). Describe an application of SEA with example **07**
- (b)** Explain the relationship between human activities and environmental impacts with the help of diagram and examples. **07**
- Q.2 (a)** Define the term public participation with reference to EIA studies and describe its objectives **07**
- (b)** What will be included in baseline data collection for conducting Ecological Impacts Assessment for a proposed new national highway project? **07**
- OR**
- (b)** Explain the role of EIA in sustainable development. **07**
- Q.3 (a)** A 100 KLD distillery is proposed at a location 1 km away from a river which has seasonal flow. Discuss the aspects to be covered while predicting surface Water Impact Assessment. **07**
- (b)** Discuss the aspects to be included in Social and Economic Impact Assessment for a proposed integrated steel plant requiring 1000 hectare land that includes some villages and agricultural fields. **07**
- OR**
- Q.3 (a)** For a grass-root 1000 MW coal-based thermal power plant proposed at a distance of 2 km from an industrial estate, discuss (i) the basic objective of conducting Air Impact Assessment, and (ii) characterization of the pollutants released. **07**
- (b)** What do you understand by Environmental Management Plan (EMP)? Describe contents of a good EMP **07**
- Q.4 (a)** Discuss environmental impacts characterization with examples **07**
- (b)** What do you understand by environmental carrying capacity based developmental planning? **07**
- OR**
- Q.4 (a)** Discuss your suggestions for improving quality of some EIA reports studied by you **07**
- Q.4 (b)** Compare and contrast between EIA notification 1994 and EIA notification 2006. **07**
- Q.5 (a)** A large scale multipurpose project is to be constructed across a perennial river. Enlist the probable environmental impacts and classify them. **07**
- (b)** Explain in detail the development and use of value function graphs for evaluation of impacts. Prepare value function graphs for pH and TDS. **07**
- OR**
- Q.5 (a)** Explain EIA as a four step activity. Highlight the significance of each activity. **07**
- (b)** Prepare a list of short term and long term impacts of construction of Sewage Treatment Plant. Suggest remedial measures for the impacts. **07**
