

GUJARAT TECHNOLOGICAL UNIVERSITY

M.E Sem-I Examination January 2010

Subject code: 711804

Subject Name: Environmental Impact Assessment

Date: 29 / 01 / 2010

Time: 12.00 – 2.30 pm

Total Marks: 60

Instructions:

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

- Q.1** (a) Briefly explain the role of EIA in achieving substantial development. Write an appropriate example. **06**
- (b) Write a brief note on Sustainable development. **06**
- Q.2** (a) With the help of a neat diagram explain 'Regional carrying capacity based planning process to achieve sustainable development'. **06**
- (b) Define following terms: **06**
 (i) Environmental change (ii) Environmental effect (iii) Environmental impact
 Give appropriate example of each
- OR**
- (b) Define following terms: **06**
 (i) EI analysis (ii) EI assessment (iii) EI statement
- Q.3** (a) With the help of a neat diagram explain the procedure of obtaining environmental clearance for a proposed project. **06**
- (b) Give your comment on the need of EIA for developing countries. **06**
- OR**
- Q.3** (a) Define and explain the following terms with reference to EIA notification 2006: **06**
 (i) Screening (ii) Scoping (iii) Terms of reference (TOR)
- (b) Write few lines of the role of "State Expert Appraisal Committee" and "State Environmental Impact Assessment Authority". **06**
- Q.4** (a) Develop an "Active-Impact Identification Matrix" for a 1000 MN coal based thermal power plant proposed to be located on the sea coast. **08**
- (b) Develop the relationship between man's action, environmental effects and environmental impacts. With the help of an appropriate example. **04**
- OR**
- Q.4** (a) You are asked to explain to your Air Quality Assessment team the importance of Baseline Monitoring for a High way project. What will you include in your presentation? **08**
- (b) Briefly describe the procedure you will follow to identify the location for Ambient Air Quality Monitoring. **04**
- Q.5** (a) Illustrate six-step methodology for water impact assessment. **04**
- (b) Describe prediction of impacts *on estuary* OR *on surface water* of a large chemical industry located near a river that meets sea at a distance of 2 km. **08**
- OR**
- Q.5** (a) What are the parameters to be included in base line monitoring for CETP project? Elaborate the same including the likely impacts of the project on each. **06**
- (b) Define and explain EIA as a four step activity. **06**
