

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII (NEW) EXAMINATION – WINTER 2023****Subject Code:3171311****Date:01-12-2023****Subject Name: Environmental Impact Assessment****Time: 10:30 AM TO 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.
4. Simple and non-programmable scientific calculators are allowed.

- Q.1** (a) What is sustainable development? **03**
 (b) Enlist the methods to achieve sustainable development and explain any two. **04**
 (c) Highlight the relationship between man's action, environmental effects and impact with the help of a labeled flow diagram. **07**
- Q.2** (a) Enlist the results of non-harmonious development. **03**
 (b) Differentiate between Rapid and comprehensive EIA. **04**
 (c) Enlist the four steps of EIA and explain the significance of each step. **07**
- OR**
- (c) Enlist the detailed contents of EIA and explain any five. **07**
- Q.3** (a) Enlist and explain any three players of EIA. **03**
 (b) List the steps that are to be followed when conducting an EIA for air environment. **04**
 (c) What is a Baseline study? How is baseline study conducted? What is its importance in EIA? **07**
- OR**
- Q.3** (a) Explain Leopold matrix method of EIA. **03**
 (b) What are environmental attributes? Enlist the eight categories of attributes and explain anyone. **04**
 (c) How is EIA an integral part of decision-making process? Justify with an explanation. **07**
- Q.4** (a) Explain giving examples: acceptable, conditionally acceptable and completely unacceptable impacts. **03**
 (b) Highlight the short term and long-term impacts of expansion project of a port and harbour. **04**
 (c) Write a detailed note on Value function graphs. Draw graphs of any two parameters. **07**
- OR**
- Q.4** (a) Differentiate between primary impacts, secondary impacts and tertiary impacts. **03**
 (b) Enlist the requirements of a good EIA method. **04**
 (c) Explain various direct and indirect impacts likely to occur for typical (i) Land Cleaning Activity and (ii) Road Construction Activity. **07**
- Q.5** (a) State in brief various biological environment impacts of a Construction Project. **03**
 (b) Write the importance of Environmental Cost Benefit analysis. **04**
 (c) State the merits and demerits of public participation in EIA process? **07**
- OR**
- Q.5** (a) Differentiate between the terms screening and scoping. **03**
 (b) Classify the projects that require prior environmental clearance. **04**
 (c) Explain the important steps for obtaining environmental clearance as per EIA notification 2006. **07**