

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER-IV EXAMINATION – WINTER 2025

Subject Code:3140911

Date:13-11-2025

Subject Name:Economics for Engineers

Time:02:30 PM TO 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.
4. Simple and non-programmable scientific calculators are allowed.

	MARKS
Q.1 (a) What is learning curve? Explain its benefits	03
(b) Write down characteristics and scope of engineering economics	04
(c) Explain the types and nature of decision making also discuss the problems in the decision making.	07
Q.2 (a) Discuss in brief Nominal and Effective Interest Rate	03
(b) Write short notes on debt repayment	04
(c) State various categories of cash flows. Also explain the calculation of cash flows.	07
OR	
(c) Explain following with suitable examples: 1)Fixed cost 2) variable cost 3) total cost4) average cost 5) marginal cost 6) Recurring cost 7) non-recurring cost.	07
Q.3 (a) Explain benefit of cost ratio (B/C ratio) analysis.	03
(b) Explain sensitivity analysis and break even analysis.	04
(c) What is salvage value? How it is treated in project management?	07
OR	
Q.3 (a) Describe using illustration difference between cash costs and book costs.	03
(b) How does the economic analysis of the public sector projects differ from the private sector projects?	04
(c) Explain the concept of incremental rate of return.	07
Q.4 (a) State the two basic price indexes popular in India.	03
(b) Define Inflation and write it types	04
(c) Write a short note on present worth analysis.	07
OR	
Q.4 (a) State the monetary measures or tools to control the inflation.	03
(b) Discuss the causes of inflation	04
(c) Briefly discuss the effects of inflation on economics.	07
Q.5 (a) Explain the term payback period.	03
(b) State the different methods of debt repayment.	04
(c) Discuss the use of price indexes in engineering economic analysis.	07
OR	
Q.5 (a) Differentiate between present worth analysis and future worth analysis.	03
(b) Write short note as case study on competition in advertise segment in India.	04
(c) Explain End-Of-Year Convention.	07
