

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-IV (NEW) EXAMINATION – SUMMER 2022****Subject Code:3140911****Date:23-06-2022****Subject Name:Economics for Engineers****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) Define Engineering Economics. What is the scope of Engineering Economics? **03**
 (b) Explain Variable cost. **04**
 (c) Discuss different problems come in the way of Good Decision Making. **07**
- Q.2** (a) Explain Opportunity Cost with suitable example. **03**
 (b) What is Simple Interest and Compound Interest. **04**
 (c) State types of Cost estimating Models. Explain Power-sizing Model. **07**
- OR**
- (c) Write note on Time value of Money with suitable example. **07**
- Q.3** (a) What is Cash Flow? **03**
 (b) Explain Per unit Model of Cost estimating. **04**
 (c) Explain the application of Single-Payment Present Worth Amount Interest Formulas. **07**
- OR**
- Q.3** (a) State the different methods of Debt repayment. **03**
 (b) What is the difference between Marginal Cost and Marginal Revenue? **04**
 (c) Explain the application of Equal-Payment Series Compound Amount Interest Formulas. **07**
- Q.4** (a) What is Salvage value? **03**
 (b) Define Inflation. What are the different types of Inflation? **04**
 (c) Explain Sensitivity Analysis. **07**
- OR**
- Q.4** (a) What are the different types of Price Indexes? **03**
 (b) What is the use of Price Indexes in Engineering Economic analysis? **04**
 (c) Explain Future worth Analysis. **07**
- Q.5** (a) What is the importance of Internal Rate of Return method? **03**
 (b) What is the difference between Inflation and Deflation? **04**
 (c) Write note on Present Worth Analysis. **07**
- OR**
- Q.5** (a) What is Life Cycle Costs? **03**
 (b) State different steps for Effective Decision Making Process. **04**
 (c) Explain Breakeven Analysis. **07**
