# Bachelor of Instrumentation and Electronics Engineering Examination, 2025

(4th Year, 1st Semester,)

## Economics

**Time: Three Hours** **Full Marks: 100**

Different parts of the same question should be answered together

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**1.** **Answer the following question** **5 x 1 = 5**

Explain comparative advantage and specialization. **5**

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**2.** **Answer any two from (a), (b) and (c) in this block** **25 x 2 = 50**

**(a)** Write short notes on any five of the following: **5 x 5**
- (i) Law of Returns
- (ii) Price controls
- (iii) Law of supply & determinants of supply
- (iv) Law of marginal utility and its relation with the demand curve
- (v) Price elasticity of demand
- (vi) Central problems of an economy

**(b)** (i) How do engineers contribute to the world society? **3**
(ii) At what stage and why should a firm produce according to the law of variable proportions? **3**
(iii) Illustrate, if price of coffee increases, what will happen to the demand curve of tea. **3**
(iv) Describe Giffen goods. **3**
(v) Suppose $P = 40 - 0.2Qd$ and $P = 10 + 0.10\ Qs$, find equilibrium price and quantity. **3**
(vi) Enumerate assumptions of equi-marginal utility. **4**
(vii) Prove that marginal utility of money is constant under the law of equi-marginal utility. **6**

**(c)** Describe in detail the internal economies of scale. Explain Production Possibility Frontier with an appropriate illustration. **15 + 10**

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**3.** **Answer any two questions from (a), (b) and (c) in this block** **15 x 2 = 30**

**(a)** Prepare a cost sheet from the following data (all costs are in Rs.'000): **15**

The cost of sale of Shani Maharaj Company is made up as follows:-

Material used in manufacturing Rs 5,500
Material used in packing material Rs 1,000
Material used in selling the product Rs 150
Material used in the factory Rs 175
Material used in the office Rs 125
0Labour required in production Rs 1,000
Labour required for supervision in factory Rs 200
Expenses direct factory Rs 500
Expenses indirect factory Rs 100

Expenses office Rs 125
Depreciation of office building Rs 75
Depreciation on factory plant Rs 175
Selling expenses Rs 350
Freight on material Rs 500
Advertising Rs 125
Assuming that all products manufactured and sold, what should be the selling price be fixed to obtain a profit of 20% on selling price.

**(b)** (i) Make comparisons of competitive, monopolistic, oligopoly and monopoly competition in a tabular format. **10**

(ii) Describe price discrimination. **5**

**(c)** Illustrate cost curves of perfect competition. Describe price skimming. **9 + 6**

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**4.** **Answer any one from (a) and (b) in this block** **15 x 1 = 15**

**(a)** Describe features of Indian economy. **15**

**(b)** Describe structure of WTO. Enumerate objectives of WTO. What are the functions of WTO? **5 + 5 + 5**