

Roll No. to be filled in your Answer Book

Roll No.

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**B. Tech**

(Sem. III) UTU EXAMINATION, 2013-14

**ENGINEERING ECONOMICS AND COSTING**  
**(Only for CS/IT)**

Time : Three Hours]

[Max. Marks : 50

**Note :** Attempt All Question

1. Attempt any four from following [2.5 X 4=10 Marks]

- Time Value of Money
- Compound Interest
- Cost Application
- Linear models
- Standard Costing
- Product Costing

Attempt any two from following [5 X 2=10 Marks]

- Briefly explains and illustrates the concept of 'Time Value of Money'.
- What is the difference between the future value and present value?
- What is compound interest? Why it is important.

3. Attempt any two from following [5 X 2=10 Marks]
- a) What are the uses and situation for equivalent annual worth comparison.
- b) How would you calculate the IRR.
- c) State the comparison of assets of equal and unequal life.
4. Attempt any two from following. [5 X 2=10 Marks]
- a) Discuss the Cost effectiveness analysis
- b) How a project can be quantified
- c) You are required to calculate the break-even point from the following information:  
 Selling price per unit: Rs. 20  
 Variable cost per unit: Rs. 4  
 Fixed cost for the year: Rs. 80,000  
 Estimated sales for the period: Rs. 2,00,000.
5. Attempt any two from following. [5 X 2=10 Marks]
- a) What is depreciation? And also describe depreciation techniques.
- b) Write Short Notes on:  
 (i) Product & Process Costing.  
 (ii) Cost estimation.

- c) A product passes through three processes A, B and C, units at a cost of Re 1 were issued to process A. The other direct expenses were:

| Particular      | Process A | Process B | Process C |
|-----------------|-----------|-----------|-----------|
| Sundry Material | 1,000     | 1,500     | 1,480     |
| Direct Labour   | 5,000     | 8,000     | 6,500     |
| Direct Expenses | 1,050     | 1,188     | 1,605     |

The wastage of process A was 5% and process B 4%. The wastage of Process A was sold at Rs. 0.25 per unit and that of B at Rs. 0.50 per unit and that of C at Rs. 1.00 per unit. The overhead charges were 168% of direct labour. The final product was sold at Rs. 10.00 per unit, fetching a profit of 20% on sales. Find the percentage (%) of wastage in Process C.

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