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10ME71

**Seventh Semester B.E. Degree Examination, June/July 2018**  
**Engineering Economy**

Time: 3 hrs.

Max. Marks:100

**Note: 1. Answer any FIVE full questions, selecting at least TWO questions from each part.**  
**2. Use of discrete interest tables is permitted.**

**PART – A**

- 1 a. Briefly explain Intution and analysis with respect to decision making. (06 Marks)  
b. Explain briefly the law of supply and law of demand. (07 Marks)  
c. Differentiate between strategy and tactics by giving suitable example and illustration. (07 Marks)
- 2 a. Explain the conditions for present worth comparision. (10 Marks)  
b. An investor can make three end-of-year payments of Rs. 15,000, which are expected to generate receipts of Rs. 10,000 at the end of year 4 that will increase annually by Rs. 2500 for the following 4 years. If the investor can earn a rate of return of 10% on other 8 year investments, is this alternative attractive? (10 Marks)
- 3 a. Explain the following with respect to life of an asset by providing suitable example,  
(i) Ownership life.  
(ii) Accounting life  
(iii) Economic life. (10 Marks)  
b. Two models of small machines perform the same function. Type 1 machine has a low initial cost of Rs.9500, relatively high operating costs of Rs.1900 per year more than those of the type 2 machine, and a short life of 4 years. The more expensive type 2 machine cost Rs.25,100 and can be kept in service economically for 8 years. The scrap value from either machine at the end of its life will barely cover its removal cost. Which is preferred when the minimum attractive rate of return is 8%? (10 Marks)
- 4 a. Define the following:  
(i) MARR (ii) IRR (iii) ERR. (06 Marks)  
b. Define depreciation. Explain the causes of depreciation. (06 Marks)  
c. Computers purchased by a public utility cost Rs. 7000/- each. Past records indicate that they have useful life of 5 years, after which, they will be disposed of, with no salvage value. The company has a cost of capital of 7%. Determine the following by using straight line method:  
(i) Depreciation charge during year 1 and 2.  
(ii) Depreciation reserve accumulated at the end of year 3.  
(iii) The Book value of computers at the end of year 3. (08 Marks)

**PART – B**

- 5 a. Explain the importance of estimating and costing. State the various components of cost that are to be considered to arrive at the selling price during the manufacture of a product. (10 Marks)  
b. The market price of a lathe is Rs.50,000 and the discount allowed to the distributor is 20% of the market price. It is found that the selling expense cost is  $\frac{1}{4}$ <sup>th</sup> of factory cost and if the material cost, labour cost and factory overhead charges are in the ratio of 1 : 4 : 2. What profit is made by factory on each lathe if material cost is Rs. 4000. Neglect other overheads. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.



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- 6 a. What do you understand by the following financial terms:
- (i) Preferential shares. (10 Marks)
  - (ii) Assets. (10 Marks)
  - (iii) Liabilities.
  - (iv) Sundry debtors.
  - (v) Sundry creditors.
- b. Explain profit and loss statement and balance sheet, with suitable examples. (10 Marks)
- 7 a. Explain the different types of financial ratios. (14 Marks)
- b. What are the merits and demerits of financial ratios? (06 Marks)
- 8 a. List the objectives of profit planning. (05 Marks)
- b. What are the advantages and disadvantages of budgeting? (06 Marks)
- c. What are the types of budgets? Explain. (09 Marks)

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