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 $\dfrac{1}{4}^{th}$ 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)

6 a. What do you understand by the following financial terms:
      (i)   Preferential shares.
      (ii)   Assets.
      (iii)   Liabilities.
      (iv)   Sundry debtors.
      (v)   Sundry creditors.   (10 Marks)
   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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