

B.Tech-3rd-EE, ME, PE, EEE, M & M
Engg. Economics & Costing

Full Marks : 70

Time : 3 hours

Answer Q. No. 1 and any five from the rest

The figures in the right-hand margin indicate marks

1. Answer *all* the following questions : 2 × 10
- (a) What do you mean by cash flow diagram ?
 - (b) Distinguish between primary benefits and secondary benefits.
 - (c) What do you mean by physical depreciation ?
 - (d) What do you mean by internal rate of return ?
 - (e) What is the situation of breakeven point ?
 - (f) Explain cost control and cost reduction.
 - (g) What do you mean by present worth ?
 - (h) What is nominal interest rate ?

(Turn Over)

- (i) What is salvage value ?
- (j) What is taxable income ?

2. (a) An amount with compound interest becomes Rs. 1000 at the end of first year and Rs. 1200 at the end of second year. Find amount and rate of interest.

5

(b) At what rate present will a sum become double of itself in 06 years at simple interest ?

5

3. Discuss different method of computing depreciation.

10

4. Two assets are available to perform a necessary function for 3 years. The initial cost for each device at time '0' and subsequent annual saving, both in rupees are shown in the following table. The required interest rate is 9 %.

Year	00	01	02	03
Asset X	Rs. 9000	Rs. 4500	Rs. 4500	Rs. 4500
Asset Y	Rs. 14500	Rs. 6000	Rs. 6000	Rs. 8000

Compare these two assets with respect to present with criteria.

worth

5. What is Cost-Benefit Analysis ? Explain the quantification and valuation of cost-benefit analysis.

3 + 7

6. Explain the concept of cost control and give details about the techniques of cost control. 2 + 8

7. A product passes through three distinct processes- 1, 2, 3 to completion. During the week ended 15th October 2006, 500 units are produced. The following information is obtained.

	Process-1	Process-2	Process-3
Direct Material	7000	3200	3000
Direct Labour	5000	4000	5000

The overhead expenses for the period were Rs. 2800 apportioned to the process on the basis of wages. No work in progress is existed at the beginning or at the end of week. Prepare process cost account showing the unit price. 10

8. Given the following data :

Direct Labour — Rs. 3,00,000

Fixed Overheads — Rs. 2,40,000

Direct Materials — Rs. 8,20,000

Variable Overheads — Rs. 4,00,000

Sales — Rs. 20,00,000

Find out the profit and break-even sale and study the effect on break-even sales of an increase in 10% fixed overhead.