

15ME51

Fifth Semester B.E. Degree Examination, Dec.2019/Jan.2020 Management and Engineering Economics

Time: 3 hrs.

Max. Marks: 80

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.

2. Use of "Compounding Interest Factor" tables are permitted.

Module-1

- a. Define management and explain the levels of management. (08 Marks)
 - List and explain the various functions of management. (08 Marks)

OR

- 2 a. Explain the importance of planning. (08 Marks)
 - b. Explain the various steps in decision making process, with a block diagram. (08 Marks)

Module-2

3 a. Briefly explain the principles of organization.

b. Explain techniques of selection in detail.

(08 Marks)

(08 Marks)

OR

- 4 a. How does Maslow's hierarchy of needs help a manager to motivate his subordinates? Explain. (08 Marks)
 - b. Discuss the steps involved in a control process.

(08 Marks)

- Module-3
- a. With neat sketch explain problem solving process. How are the decisions taken? (08 Marks)
 - b. Find the effective rate of interest for an actual rate of interest of 10% when compounded i) Yearly ii) Biannually iii) Monthly iv) Daily. (08 Marks)

OR

- 6 a. Explain how to demand, how of supply and equilibrium point with suitable example.
 - b. Sketch and explain cash flow diagram for borrower's and lender's point of view. (08 Marks)

Module-4

- 7 a. List and explain the conditions for present worth comparisons. (08 Marks)
 - b. Two bikes of brand 'P' and 'Q' are available on the following terms:
 - i) Bike 'P' \rightarrow Make a down payment of Rs.5000 and then Rs.6000 at the end of each year for 7 years.
 - ii) Bike 'Q' \rightarrow Make a downpayment of Rs.15,000 and no payment for the next 3 years. From end of the 4th year annual payments of Rs.12,000 for next 4 years.

Select the better brand based on the future worth method of comparison. If rate of interest is 10% compounded annually. (08 Marks)

OR

- 8 a. Define the following terms:
 - i) Ownership life
 - ii) Accounting life
 - iii) Economic life.

(06 Marks)

b. A farm house can be purchased for Rs.90,000 and the expected resale value after 20 years is Rs.63,000. If the annual rental income is Rs.11,800 and expenses Rs.4,700 what will be the rate of returned earned on this farm house? (10 Marks)

Module-5

9 a. List and explain the basic methods of depreciation.

(08 Marks)

b. List and briefly explain different elements of cost required for finding selling price of the product. (08 Marks)

OR

10 a. Briefly explain methods of costing.

(10 Marks)

b. A C.I. stepped bar is shown in Fig.Q.10(b). Taking density of CI as 7.0208 gm/cc. Calculate unit of component. Also what is the cost of material if cost per kg is Rs.100? (06 Marks)

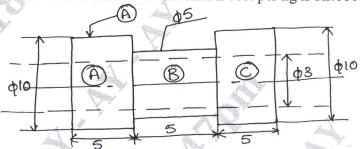


Fig.Q.10(b)

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