Registration No. :

Total number of printed pages – 2

Third Semester (Special) Examination – 2013
ENGINEERING ECONOMICS AND COSTING
BRANCH : AEIE, BIOTECH, CSE, EC, EEE, ELECTRICAL, IT, MECH, TEXTILE
### QUESTION CODE : D 187

Full Marks – 70

Time : 3 Hours

Answer Question No. 1 which is compulsory and any five from the rest.
The figures in the right-hand margin indicate marks.

1. Answer the following questions :   2×10

    (a) Why should engineers study Engineering Economic ?

    (b) What is demand function ?

    (c) What is composite demand ? Give an example.

    (d) What is elasticity of demand ?

    (e) What is perfect competition ?

    (f) As a result of 10% fall in the price of a good, its demand raises from
         10 units to 12 units. Find out the price elecitity of demand.

    (g) What is economies of scale ?

    (h) What are the features of a public projects.

    (i) What are IRR and MARR ?

    (j) What is a break-even point ?

2. Mr. X has taken a loan of Rs.15 lakhs from SBI to build a house at an interest rate
    of 11% compounded annually. This is to be repaid in 18 annual installments. Find
    the amount of installment.   10
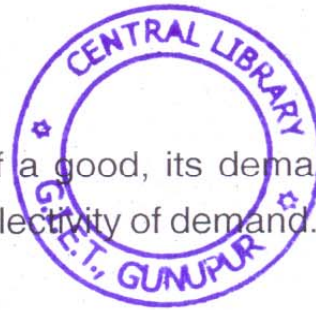
3. From the following particulars given below, prepare cost sheet :

Direct material	:	Rs.45,700
Direct labour	:	Rs.12,400
Factory over head	:	10% of prime cost
Admn. Over head	:	10% works cost
Selling & Distribution overhead	:	10% of cost of production.
Direct expenditure	:	Rs.7800

Calculate sales, when profit is 10% on sales. Company has produced and sold 10 units. 10

4.

Fixed Expenditure	:	2,00,000
Sale	:	5,00,000
Profit	:	1,00,000

Find : P/r Ration, BEP, MOS and sales required to earn a profit of Rs.1,40,000.

10

5. From the following information, calculate which equipment should be bought ?

	Eq – 1	Eq – 2
Initial cost	Rs. 10,000	15,000
Annual operative Expenditure	Rs. 1,000	800
Life	8 year	8 year
Interest rates	5%	5%
Salvage value	Rs. 1000	3000

10

6. Discus the function of a commercial bank. 10

7. Explain in detail the law of returns to scale with a diagram. 10

8. Write short notes on any **two** of the following : 5×2

   (a) Law of supply

   (b) Elements of cost

   (c) Indian Financial System.

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