DIPLOMA VIEP MECHANICAL ENGINEERING (DMEVI)

Term-End Examination

December, 2013

BIMEE-030 : INDUSTRIAL ORGANIZATION AND MANAGEMENT

Time : 2 hours   *Maximum Marks : 70*

Note :   *(i)*   *Answer **any five** questions only.*

(ii)   *Assume suitable data if any missing.*

(iii) *Use of scientific calculator is allowed.*

1. (a) Define management and explain the   7
         concepts of management . What are the
         various management principles?

    (b) "For the most part, individual decision   7
         making in organizations is an irrational
         process" Do you agree or disagree ? Discuss.
         Explain the decision making process.

2. (a) Explain the term, " organisation structure".   7
         What are the characteristics of a sound
         organisation structure?

    (b) Define motivation. Briefly enumerate the   7
         importance of motivational techniques.

3. (a) Discuss in detail the various factors that   7
         determine the working capital requirement
         of a firm.

    (b) What do you understand by ABC analysis   7
         of inventories ? What are its advantages and
         limitations ?

4. (a) A manufacturer has to supply his customers 7
600 units of his product per year. Shortages
are not allowed and the inventory carrying
cost amounts to Rs 0.60 per unit per year.
The set up cost per run is Rs 80. Find
   (i) The Economic Order Quantity
   (ii) The minimum average yearly cost
   (iii) The optimum number of orders per
   year
   (iv) The optimum period of supply per
   optimum order.

(b) Define "budget". Explain how budgets are 7
used to plan allocation of resources and to
control over the activities of various
departments in an industry.

5. (a) Describe purchasing procedure to be 7
adopted for a medium size industry.

(b) A small project consists of six activities with 7
the following information.

Activity	Normal duration (days)	Crash duration (days)	Crashing cost(Rs/day)
1-2	9	6	20
1-3	8	5	25
1-4	15	10	30
2-4	5	3	10
3-4	10	6	15
4-5	2	1	40

(i) Draw the network and obtain normal
and minimum project duration.
(ii) Find the additional cost of the project
for the minimum project duration.

6. (a) Explain various tools of productivity. How 7
       productivity can be increased.

   (b) The fixed costs for the financial year 7
       2010-11 are Rs.40,000. The sales for this
       period are of Rs.100,000. The variable cost
       per unit is Rs 2. Selling price of each product
       is Rs 10 and the number of units involved
       coincides with the expected volume of
       output. Construct the break-even chart and
       determine :
       (i)   Break-even point
       (ii) What is the minimum number of
             products that should be sold to earn
             profit?
       (iii) Profit earned at a turnover of
             Rs.80,000
       (iv) Margin of safety.

7. Write short notes on *any four* of the following :
   (a) Quality circles $3\frac{1}{2} \times 4 = 14$
   (b) Functions of RBI
   (c) Enterprise Resource planning (ERP)
   (d) Industrial dispute
   (e) Efficiency and Effectiveness
   (f) Just-in-Time Technology (JIT)

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BIMEE-030   3