

Total No. of Questions : 8]

SEAT No. :

P4646

[4860] - 1380

[Total No. of Pages : 3

M.E. (Polymer Engineering) (Semester - I)
PRINCIPLES OF MANAGEMENT
(2013 Pattern)

Time : 3 Hours]

[Max. Marks : 50

Instructions to the candidates:

- 1) *Solve any 5 questions from total 8 question.*
- 2) *Neat diagrams must be drawn wherever necessary.*
- 3) *Figures to the right side indicate full marks.*
- 4) *Use of Calculator is allowed.*
- 3) *Assume Suitable data if necessary.*

- Q1)** a) Discuss product differentiation and market segmentation. [4]
b) Write short note on return on investment. [3]
c) Discuss marginal costing in detail. [3]
- Q2)** a) State various forms of organizations. Briefly explain them. [6]
b) A finance company promises to pay lumpsum of Rs. 8,000 at the end of 6 years to investors who deposit annually Rs. 1,000 for 6 years. What is the implicit rate of interest? [4]
- Q3)** a) Comment on the importance of plant layout. [3]
b) Elaborate various factors governing plant location. [4]
c) What do you understand by profit and loss account? [3]
- Q4)** a) A company purchase the machine and it was decided to charge depreciation at 10% using reducing balance method. The written down value of machine was Rs. 59049 at the end of 5 years. Find original cost of the machine. What would be it written down value after 8 years? [5]

P.T.O.

b) Information related to the first half of the year ending is given below. [5]

Fixed expenses = Rs. 1,00,000

Sales value = Rs. 3,00,000

Profit = Rs. 50,000

During the second half of year company has projected loss of Rs. 10,000.

Calculate,

- i) P/v ratio, break-even point and margin of safety of 6 months ending
- ii) The break-even point and margin of safety for the whole year.

Q5) a) Draw the network and, find critical path as well as project duration for the project data given in following table. find also total float. [5]

Activity	Duration in days	Activity	Duration in days
10-20	9	20-70	0
10-30	4	30-60	10
10-40	7	40-80	8
10-50	8	50-70	6
20-50	7	60-80	10

b) Briefly discuss various strategies of pricing. [5]

Q6) a) Solve following transportation problem. [5]

Destination					
	A	B	C	D	
Source	21	16	25	13	11
	17	18	14	23	13
	32	27	18	41	19
Requirement	6	10	12	15	43
	Availability				

b) The processing time for machines, A and B, is given as follows. Calculate optimal sequence, total elapsed time and idle time for each machine under the given condition that all the seven jobs must go through two machines. [5]

Job/Time (hrs)	1	2	3	4	5	6	7
Machine A	3	12	15	6	10	11	9
Machine B	8	10	10	6	12	1	3

- Q7)** a) Give at least three methods of calculation of depreciation. [6]
b) Discuss importance of advertisement, labelling and packaging in marketing. [4]
- Q8)** a) Discuss the concept of standard time and also elaborate on various allowances in time study. [5]
b) Write short note on fixed and working capital. [5]

