SDV – 21

M.Com. (Semester – IV) Examination, April/May 2013
ACCOUNTING AND FINANCE
CO4A3 : Cost Management

Duration : 2 Hours Total Marks : 50

Instructions *: 1)* ***All*** *questions are* ***compulsory****.*
2) ***Marks*** *allotted shown against* ***each*** *question.*

1. Discuss briefly the following five questions : **10**
   a) Tear down analysis
   b) Strategic focus on Cost Management
   c) Cost-benefit analysis
   d) Phases in learning curve
   e) Responsibility centre.

2. A) State and explain the various uses of Cost Management in the field of production, sales and distribution and administration of a business unit. **10**

   OR

   X) What is a Balanced Scorecard ? Discuss the process of implementation of a good balanced scorecard. **10**

3. A) What is a linear programming technique ? Comment on its applicability in day-to-day business environment. **10**

   OR

   X) What are the areas in which activity based costing is used for decision making. **10**

4. A) Using graphical method solve the following Linear Programming problem to find the optimal solution and achieve the objective function

   Maximise $z = 2x_1 + 3x_2$

   Subject to
   $$x_1 + x_2 \leq 30$$
   $$x_2 \geq 3$$
   $$0 \leq x_2 \leq 12$$
   $$x_1 - x_2 \leq 0$$
   $$0 \leq x_1 \leq 20$$
   $$x_1 \geq 0, x_2 \geq 0$$

   10

   OR

P.T.O.

X) The company has four terminals M, N, O and P. At the start of a particular day 10, 4, 6 and 5 trailers respectively are available at these terminals. During the previous night 13, 10, 6 and 6 trailers respectively were loaded at plants P, Q, R and S. The dispatcher has come up with costs between the terminals and plants as follows :

Terminals \ Plants	P	Q	R	S
M	20	36	10	28
N	40	20	45	20
O	75	35	45	50
P	30	35	40	25

Using Vogel's approximation method, find the allocation of loaded trailers from plants to terminals in order to minimise transportation cost. Also check whether it fulfills the condition "m + n – 1" to see that the solution obtained is not a degenerate solution. **10**

5. A) A project has the following time schedule :

Activity	Time in weeks	Activity	Time in weeks
1 – 2	4	5 – 7	8
1 – 3	1	6 – 8	1
2 – 4	1	7 – 8	2
3 – 4	1	8 – 9	1
3 – 5	6	8 – 10	8
4 – 9	5	9 – 10	7
5 – 6	4		

Construct a network diagram and compute :

a) Critical path and its duration
b) Total float
c) Earliest start time
d) Latest start time
e) Earlier finish time
f) Latest finish time. **10**

OR

X) A manufacturing company has four zones A, B, C and D and four sales engineers P, Q, R and S respectively for assignment. Since the zones are not equally rich in sales potential, it is estimated that a particular engineer operating in a particular zone will bring the following sales :

Sales Engineers	Zones (Sales) (in '000)			
	A	B	C	D
P	140	112	98	154
Q	90	72	63	99
R	110	88	77	121
S	80	64	56	88

Find the optimum assignment so as to maximise the expected total sales. **10**