## K.J. Somaiya Institute of Management Studies and Research.

### Project Management,

## PGDM(Ops), MMS(Ops), PG (Fin), PG (Mktg), MMS (Fin), MMS(Mktg), PG (IB) Trimester VI. (Batch 16-18)

## Marks : 25 Time : 2 Hours Date : 03/04/2018

# Pls attempt Question No.1( max marks 5), and 2 questions from 2/3/4&5 (each carry 10 marks)

1 What are the six elements of a typical scope statement? Describe the scope statement of a hypothesized luxury hotel complex....

#### OR

Explain what do you mean by Projects and Project Management. What are the key characteristics that differentiate projects from other functions carried out in the daily operations of the organization.

2a). Explain how S curves and concept of "Earned Value" are useful to the top management in assessment, monitoring and control of project schedules and costs.

2b). A project consisting of eight activities was reviewed on completion of 12 days after the start.

Find the project performance based on the basis of CPI and SPI. What is the estimated duration and cost at completion of the project.

Activity	Duration (days)	Budgeted cost of activity (Rs. 000)	Actual cost of activity till date (Rs.000)	
A (1-2)	5	60	62	100
B(2-3)	7	70	70	100
C(2-4)	5	75	73	100
D(2-5)	7	82	70	90
E(3-6)	6	69	0	0
F(4-6)	8	54	10	20
G(5-7)	6	50	0	0
H(6-7)	5	40	0	0

3a). Explain the terms "Resource Smoothing" and "Resource Constrained Scheduling". How

does Resource scheduling reduce flexibility in managing projects?

3b).Draw the project network and resource chart for the project schedule based on the table given below and find out the following:-

- i) Total time for completion
- ii) Days of over allocation of resources if maximum workers available are 25

Activity	Predecessors	Duration	Manpower
A	-	8	4
B ·		7	8
С	A	6	5
D	B	8	4
E	В	4	8
F	B .	- 8	6
G	C,D	. 5	5
Н	E	6	4
I	F	6	5
J	Ġ,H,I	10	6

- 4 a) Explain the relative advantages and disadvantages of the functional, matrix and dedicated team approaches to managing projects.
  - 4 b) Below table shows the activities of a project.

Activity Immediate Predecessors		Normal (Rs.000)		Crash (Rs.000)	
	Predecessors				
	Time (Weeks)	Cost in Rs. 000)	Time (Weeks)	Cost in Rs. 000)	
1-2	-	21	175	20	400
1-3	-	21	500	18	900
1-4	-	11	1100	10	1300
2-6	1-2	16	2400	12	3200
3-6	1-3, 1-4	11	1925 .	7	2075
3-7	1-3, 1-4	15	2400	13	2850
3-5	1-3,1-4	5	1050	4	1225
4-5	1-4	12	3600	10.	4000
5-7	3-5, 4-5	9	3150	7	3750
6-7	2-6, 3-6	.19	7600	3	14800

i) Draw the network and find out the critical path and the nominal project duration

ii) What is the minimum length of the project and the corresponding cost when all critical activities are crashed to the maximum extent.

5a. What do you understand by the "Three Time estimates" method for network scheduling and under what circumstances it is used? What is the probability of completing the project within the

total scheduled time calculated on the basis of Three Time estimate method?

5b. The expected times and variances for the project activities are given below in weeks. What is the probability of completing the project in 30 weeks? If you had to give an assurance of 95% probability of the project being completed, how many days would you ask for?

ID	Description	Predecessor	<u>t</u> e	Variance
				<u>[(b-a) /6] <sup>2</sup></u>
1	Pilot production	None	7	3
2	Select channels of distrib.	None	7	4
3	Develop mktg. program	None	4	2
4	Test market	1	5	2
5	Patent	1	10	5
6	Full production	4	16	10
7	Ad promotion	3	3	2
8	Release	2,5,6,7	3	1

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