

5/6/07  
Con. 3223-07.

B-E (E) Jan 07 (R)

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(REVISED COURSE)

(3 Hours)

Project Management

ND-1777

[Total Marks : 100]

MAD TEN

- N.B. : (1) Attempt any five questions.  
 (2) All the answers for the subquestion to be written together.  
 (3) Use legible handwriting.  
 (4) Quality of the answer carries more weightage than the quantity.

1. As per the weather forecasts, heavy rains are going to hit the Mumbai city during the beginning of June, which reminds in the disaster the city faced two years ago. With this background, answer the following :—
- (a) Is this a project for our BMC, Justify. 3
  - (b) If so, what are the milestones of the project. 5
  - (c) Prepare a brief Project Report/Charter mentioning the major elements for the above project. 12
2. (a<sub>1</sub>) Explain SWOT analysis in project. 4  
 (a<sub>2</sub>) Which phase of the project it is carried out. 2  
 (a2) If it is not done, what are the consequences. 4  
 (b) Draw the PERT network. Identify the critical path and find out the probability of completing the project within 45 days. 10

Activity	Predecessor	Time required in days		
		Optimistic	Most likely	Pessimistic
A	None	3	4	5
B	A	4	7	10
C	B	2	7	12
D	A	3	5	13
E	D	1	5	9
F	A	7	8	21
G	F	1	7	7
I	C, E	10	10	10
J	G	15	20	25
K	L, I, J	2	7	12
L	A	10	15	20

Refer Annexure II for data.

3. (a) List out typical 'key stakeholders' in any project and against each one mention the nature and extent of influence it exerts over any project. 10  
 (b) The cash flow data for a project is given below. Find out the NPV of the project and comment upon the result. Refer Annexure I for additional data. 10

Year	Cash out flow	Cash inflow
1	75	—
2	50	—
3	—	16
4	—	16
5	—	16
6	—	16
7	—	16
8	—	16

Cash flow given above is in Rs. lakhs.  
 Assume the interest rate at 12%.

[TURN OVER

SEE VIII Sem Project Mgt

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4. (a) Explain the term 'motivation' and 'Communication' in projects. In which phase of the project it is relevant. 10
- (b) Write a detailed note on 'Project Cost Management'. 10
5. (a) Explain 'Logistics Management' in projects. 10
- (b) What are the steps involved in tendering process and list out the commercial terms and conditions of tenders. 10
6. (a) Explain 'Risk Analysis and Management' in project. 10
- (b) The following information relates to a construction project. 10

Activity	Preceding activity	Duration in Weeks		Direct cost (in Rs.)	
		N	C	N	C
a	—	15	12	4500	5250
b	—	19	14	4000	4500
c	—	9	5	2500	4500
d	a	6	5	1700	1940
e	a	14	9	4300	5350
f	b, d	9	6	2600	3440
g	c	8	3	1800	3400

This is a fixed cost of Rs. 500 per week.  
 Carryout the crashing to the optimum level.  
 Each activity may be reduced to the crashed duration in weekly stages at pro rata cost.

7. Write short notes on any four :— 20
  - (a) Total Quality Management.
  - (b) Social Cost Benefit Analysis.
  - (c) Technical Feasibility Analysis.
  - (d) Project Scope Management.
  - (e) Project Handover Phase.
  - (f) Human Resource Management.

Activity	Normal Duration (Weeks)	Crashed Duration (Weeks)	Normal Cost (Rs.)	Crashed Cost (Rs.)
a	15	12	4500	5250
b	19	14	4000	4500
c	9	5	2500	4500
d	6	5	1700	1940
e	14	9	4300	5350
f	9	6	2600	3440
g	8	3	1800	3400