

LE COLLEGE MORBI

CO1- ASSIGNMENT

SUB: Project Management (3171506)

Chapters:01 & 02- Project Management & Organizing the project

ATTEMPT FOLLOWING QUESTIONS WITH NEAT SKETCH IF NECESSARY

- 1) What is definition of Project? Explain 3 objectives of a project.
- 2) Explain the difference between project management and general management.
- 3) Explain the 3 goals of a project in detail.
- 4) What is 'S' shaped and 'J' Shaped project life cycle? Explain in detail.
- 5) Explain various Non numeric selection methods of project selection in detail.
- 6) Explain various Numeric selection methods of project selection in detail.
- 7) What are steps involved in a project portfolio process? Explain in detail.
- 8) Explain different project formulation stages along with advantages of project formulation.
- 9) What are roles and responsibilities of a project manager? Explain in detail.
- 10) Enlist various criteria's for selection of project manager & Explain any 3 in detail.
- 11) Explain functional organizational structure in detail along with its advantages and disadvantages.
- 12) Explain Project-based organizational structure in detail along with its advantages and disadvantages.
- 13) Explain matrix organizational structure in detail along with its advantages and disadvantages.
- 14) Explain Project team organizational chart in detail.

Vision of the Department:

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Mission of the Department:

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CO2- ASSIGNMENT

SUB: Project Management (3171506)

Chapters:03 & 04- Planning the project & Budgeting the Project

ATTEMPT FOLLOWING QUESTIONS WITH NEAT SKETCH IF NECESSARY

- 1) Why project planning is important?
- 2) Explain the different contents of project plan in detail.
- 3) Briefly explain the overview of the project planning.
- 4) Explain the planning process of nuts and bolts.
- 5) Explain the work breakdown structure with characteristics and steps involved in to create it.
- 6) Enlist different forms of Work Breakdown structure and explain any 2.
- 7) Explain RACI matrix in detail.
- 8) Discuss about Mind mapping in detail.
- 9) Briefly explain about the multidisciplinary teams.
- 10) Enlist various methods of budgeting and explain Top-down & Bottom down approach in detail.
- 11) Explain Cost estimating & various techniques of improving cost estimates.
- 12) Explain in brief about risk management.
- 13) Explain various steps used in Failure mode and Effect analysis(FMEA).
- 14) Explain various methods of Quantitative Risk analysis.
- 15) Define Simulation and write down various steps involved in simulation process with its advantages & disadvantages.

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CO3- ASSIGNMENT

SUB: Project Management (3171506)

Chapters:05 & 06- Project Network Theory & Allocating the Resources to the Project:

ATTEMPT FOLLOWING QUESTIONS WITH NEAT SKETCH IF NECESSARY

- 1) Explain different terminologies used in network analysis with rules for drawing of network diagram.
- 2) What is difference between AON and AOA diagrams? Also list down steps described in Fulkerson's Rule for numbering of Nodes.
- 3) Discuss types of float and slack used in Critical path method(CPM).
- 4) Explain forward and backward path calculation used in Critical path method(CPM).
- 5) Differentiate between CPM and PERT.
- 6) Define the following terms in briefly:
 - 1) optimistic time estimate(t_o)
 - 2) Pessimistic time estimate(t_p)
 - 3) Most likely time estimate(t_m)
 - 4) Distribution curve for PERT
 - 5) Probability of completing the project
- 7) Explain The Gantt chart in detail.

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- 8) Explain briefly about resource loading and also list down factors affecting resource loading.
- 9) Explain about resource leveling in brief and also list down the techniques used in it.
- 10) Explain Goldratt's critical chain method for planning and managing projects.
- 11) Explain various types of Costs and terminologies used in cost analysis.
- 12) Enlist down steps used in crashing of network.
- 13) Construct a network diagram for a project whose activities and their precedence relationship are given in below fig .

Activity	Immediate predecessor
A	-
B	-
C	-
D	A
E	B
F	B
G	C
H	D
I	E
J	H, I
K	F, G

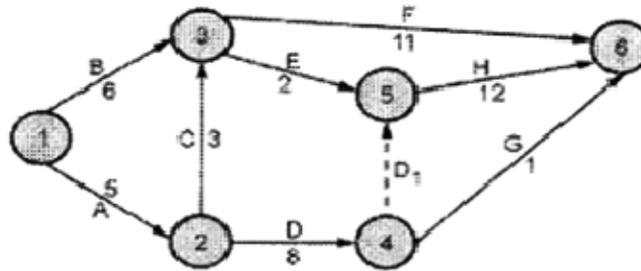
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14) For the network given; find



- 1) Total duration required to complete the project
- 2) Identify the critical path
- 3) Calculate total float, full float, and independent float for each activity.

15) Find the path by drawing network and find the total duration for all projects. The activities precedence and their delays are given below:

<i>Activity</i>	<i>Predecessor</i>	<i>Duration</i>
<i>A</i>	-	4
<i>B</i>	<i>A</i>	6
<i>C</i>	<i>A</i>	4
<i>D</i>	<i>C</i>	7
<i>E</i>	<i>C</i>	9
<i>F</i>	<i>C</i>	8
<i>G</i>	<i>E</i>	6
<i>H</i>	<i>F</i>	5
<i>I</i>	<i>G, H</i>	4
<i>J</i>	<i>B</i>	3
<i>K</i>	<i>J</i>	2

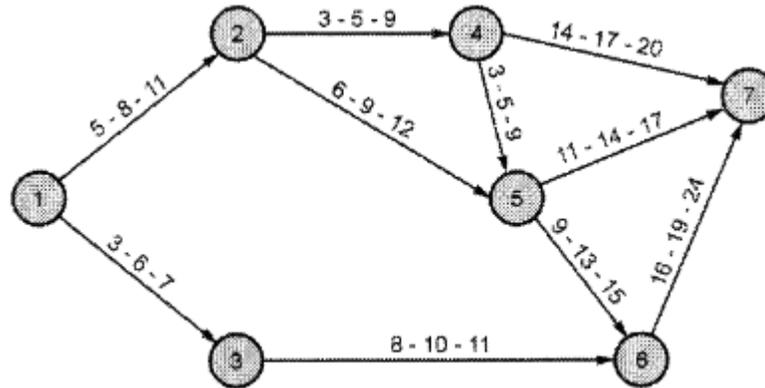
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- 16) Consider the network shown in fig below, For each activity, the three time estimates t_o , t_m and t_p are given along the arrows in t_o - t_m - t_p order .Determine variance and expected time for each activity.



- 17) Following data refer to a project:

Activity	Immediate predecessor	Optimistic time (Hrs)	Most likely time (Hrs)	Pessimistic time (Hrs)
A	-	4	6	8
B	-	1	4.5	5
C	A	3	3	3
D	A	4	5	6
E	A	0.5	1	1.5
F	B, C	3	4	5
G	B, C	1	1.5	5
H	E, F	5	6	7
I	E, F	2	5	8
J	D, H	2.5	2.75	4.5
K	G, I	3	5	7

- Draw the network diagram
- Find out the ES,EF,LS,LF and Slack for Each Activity
- Find out the variance and standard deviation for the critical path
- Determine the probability of completing the project in 24 Hrs.

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- 18) A bakery keeps stock of a popular brand of cake. Daily demand based on past experience is given below:

Daily demand	0	15	25	35	45	50
Probability	0.01	0.15	0.20	0.50	0.12	0.02

Consider the following sequence of random numbers

48,78,09,51,56,77,15,14,68 and 99

Using the sequence, simulate the demand for the next 10 days.

Also Estimate the daily average demand for the cakes on basic of the simulated data.

- 19) The data of normal time and crash time with the normal costs and carsh costs for each of these activities are given below in the table.

Activity	Normal		Crash	
	Time (Days)	Cost	Time (Days)	Cost
1-2	6	60	4	100
1-3	4	60	2	200
2-4	5	50	3	150
2-5	3	45	1	65
3-4	6	90	4	200
4-6	8	80	4	300
5-6	4	40	2	100
6-7	3	45	2	80

The indirect cost per day Rs-10/-

- 1) Draw the network for project
- 2) Find the Critical path
- 3) Determine minimum time and its corresponding cost.

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20) The data for a project in the table below:

Activity	Normal		Crash	
	Time (days)	Cost	Time (days)	Cost
1 - 2	4	60	3	90
1 - 3	2	38	1	60
1 - 4	6	150	4	250
2 - 4	5	150	3	250
2 - 5	7	115	5	175
3 - 4	2	100	2	100
4 - 5	4	100	2	240

Indirect cost also varies as follows:

Days	15	14	13	12	11	10	9	8	7	6
Cost (₹)	600	500	400	250	175	100	75	50	35	20

Draw the network. Find the optimal cost and duration.

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CO4- ASSIGNMENT

SUB: Project Management (3171506)

Chapters:07- Monitoring and Controlling the Project:

ATTEMPT FOLLOWING QUESTIONS WITH NEAT SKETCH IF NECESSARY

- 1) Explain plan-monitor-control cycle in detail.
- 2) Explain any 4 ways of data collection and also state advantages of data reporting.
- 3) What is earned value of a project? Explain different ways of calculating work completion percentages.
- 4) Explain earned value chart in detail along with diagram.
- 5) Explain go/no-go project control system in detail..
- 6) What is Critical ratio(CR)? Explain the importance of CR with an example.
- 7) What is scope creep? Explain main causes of Scope creep..

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CO5- ASSIGNMENT

SUB: Project Management (3171506)

Chapters:08- Evaluating and Terminating the Project::

ATTEMPT FOLLOWING QUESTIONS WITH NEAT SKETCH IF NECESSARY

- 1) Define Project evaluation. Explain types and objectives of project evaluation.
- 2) Explain various stages of project audit along with its objectives.
- 3) Define project termination. Explain different types of project termination.
- 4) Explain project termination process in detail.

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