

Unit 10 - week 9

Course outline

How does an NPTEL online course work?

week 1

week 2

week 3

week 4

week 5

week 6

week 7

week 8

week 9

Lecture 41:Project Management & Network Modelling: Introduction

Lecture 42:Network Modelling: PERT

Lecture 43:Network Analysis: PERT

Lecture 44:Network Analysis: PERT II

Lecture 45:Network Analysis: Crashing Network and CPM

Quiz : Assignment 9

Solution of Assignment 9

week 10

week 11

week 12

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Weekly Feedback

Assignment 9

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

Due on 2020-04-01, 23:59 IST.

Assignment 9

1) Gantt chart provides information about

1 point

- Material quantity
- Production schedule
- Material handling
- Efficiency of machine

No, the answer is incorrect. Score: 0

Accepted Answers: Production schedule

2) Major advantage of network modeling over Gantt chart is that in the former case

1 point

- Activities and events are clearly shown
- Activity times are clear
- Inter-relationship among activities is clearly shown
- Early start and late finish of an activity are clearly marked

No, the answer is incorrect. Score: 0

Accepted Answers: Inter-relationship among activities is clearly shown

3) Select the suitable sequence to develop (PERT) network model for a project

1 point

- Identification of critical activity – establishing precedence requirement – develop suitable network diagram – calculate project completion time
- Establishing precedence requirement – develop suitable network diagram – calculate project completion time – identification of activities need to be performed
- Identification of activities need to be performed - establishing precedence requirement – develop suitable network diagram – identification of critical path
- Identification of activities need to be performed – identification of critical path - establishing precedence requirement - develop suitable network diagram - calculate project completion time

No, the answer is incorrect. Score: 0

Accepted Answers: Identification of activities need to be performed - establishing precedence requirement – develop suitable network diagram – identification of critical path

4) Most likely time in PERT is

1 point

- Maximum time to complete an activity
- Minimum time to complete an activity
- Best possible estimate time
- All of the above

No, the answer is incorrect. Score: 0

Accepted Answers: Best possible estimate time

5) Draw the network and identify the critical path duration for the below given detail

1 point

Activity	t_o (days)	t_m (days)	t_p (days)
1 – 2	1	2	3
1 – 3	5	6	7
1 – 4	3	5	7
2 – 5	5	7	9
3 – 5	2	4	6
5 – 6	4	5	6
4 – 7	4	6	8
6 – 7	2	3	4

- 11
- 14
- 17
- 18

No, the answer is incorrect. Score: 0

Accepted Answers: 18

6) In a PERT network, expected project duration from the start of the project is 25 days and variance is 5 days. Probability of the project to be complete in 25 days is (given $p(-0.4) = 0.34458$, $p(-3.9) = 0.00005$, $p(0) = 0.5000$ and $p(1) = 0.84134$)

1 point

- 34%
- 50%
- Zero
- 84%

No, the answer is incorrect. Score: 0

Accepted Answers: 50%

7) The standard deviation for a PERT diagram is calculated by

1 point

- Taking the sum of the variances on the nodes on the critical path, then find the square root
- Taking the sum of the variance on all the nodes, then find the square root
- Taking the sum of the standard deviations on the nodes on the critical path
- Taking the sum of the standard deviations on all the nodes

No, the answer is incorrect. Score: 0

Accepted Answers: Taking the sum of the variances on the nodes on the critical path, then find the square root

8) CPM and PERT can be differentiated on the basis of

1 point

- PERT deals with the events and CPM with activities
- Critical path is determined in PERT only
- Costs are considered in CPM only and not in PERT
- Guessed times are used in PERT whereas times in CPM are more certain

No, the answer is incorrect. Score: 0

Accepted Answers: Guessed times are used in PERT whereas times in CPM are more certain

9) Critical path method in project management is used to

1 point

- Provide a non-realistic approach to daily problems
- Control the inventory according to production
- Find the probability to complete the work
- Identifying the critical and non-critical activities

No, the answer is incorrect. Score: 0

Accepted Answers: Identifying the critical and non-critical activities

10) Crashing of network results in

1 point

- Decrease in project completion time
- Increase in project time
- Increase in indirect cost
- Both 'b' and 'c'

No, the answer is incorrect. Score: 0

Accepted Answers: Decrease in project completion time