Assignment 8

The due date for submitting this assignment has passed. **Due on 2019-09-25, 23:59 IST.**
As per our records you have not submitted this assignment.

1) PERT analysis computes the variance of the total project completion time as: 1 point
   - The sum of the variance of all activities in the project
   - The sum of the variance of all activities on the critical path
   - The sum of the variance of all activities not on the critical path
   - The variance of the final activity of the project

No, the answer is incorrect.
Score: 0
Accepted Answers:
*The sum of the variance of all activities on the critical path*

2) An activity has an optimistic time 15 days, a most likely time of 18 days, and a pessimistic time 1 point
   27 days. What is its expected time?
   - 18 days
   - 19 days
   - 20 days
   - 21 days

No, the answer is incorrect.
Score: 0
Accepted Answers:
*19 days*

3) An activity has an optimistic time 11 days, a most likely time of 15 days, and a pessimistic time 1 point
   of 23 days. What is its variance?

No, the answer is incorrect.
Score: 0
Accepted Answers:
*19 days*
4) A project’s critical path is composed of activities A, B and C. Activity A has standard deviation 2 of 2, activity B has a standard deviation of 1, and activity C has a standard deviation of 2. What is the standard deviation of the critical path?

- 9
- 5
- 3
- 25

No, the answer is incorrect.
Score: 0
Accepted Answers:

5) In PERT/CPM, slack time is:

- Is the amount of time a task may be delayed without changing the overall project completion time
- Is the latest time an activity can be started without delaying the entire project
- Is a task or subproject that must be completed
- Marks the start or completion of a task

No, the answer is incorrect.
Score: 0
Accepted Answers:

6) Four experts A, B, C, D examined an activity and arrived at the following time estimates.

<table>
<thead>
<tr>
<th>Experts</th>
<th>( t_a )</th>
<th>( t_m )</th>
<th>( t_p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>B</td>
<td>4</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>C</td>
<td>5</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>D</td>
<td>4</td>
<td>7</td>
<td>11</td>
</tr>
</tbody>
</table>

Determine which expert is more certain about his estimates of time:

- A
- B
- C
- D

No, the answer is incorrect.
Score: 0
Accepted Answers:

7)
Questions 7 to 10 are linked questions use given data (use normal probability distribution table for appropriate question, you can refer to video for table or other resources).

A project consists of seven activities with the following time estimates.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Predecessor activity</th>
<th>Optimistic time estimate ((t_o))</th>
<th>Most likely time estimate ((t_m))</th>
<th>Pessimistic time estimate ((t_p))</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>-</td>
<td>2</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>B</td>
<td>A</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>C</td>
<td>A</td>
<td>6</td>
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<tr>
<td>D</td>
<td>A</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>E</td>
<td>B</td>
<td>2</td>
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<td>10</td>
</tr>
<tr>
<td>F</td>
<td>C</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>G</td>
<td>D, E, F</td>
<td>6</td>
<td>8</td>
<td>10</td>
</tr>
</tbody>
</table>

Determine the critical path of the project.

- 1-2-3-5-6
- 1-2-4-5-6
- 1-2-5-6
- Inefficient data provided

No, the answer is incorrect.
Score: 0
Accepted Answers:
1-2-4-5-6

8) Find out the time required to complete the project. 1 point

- 22 weeks
- 28 weeks
- 17 weeks
- None of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
28 weeks

9) Find out the standard deviation of the project. 1 point

- 1.414
- 2.414
- 1.69
- 2.25

No, the answer is incorrect.
Score: 0
Accepted Answers:
1.414

10) Find the probability that the project will be completed in 30 week or less. 1 point

- 0.92
- 0.65
- 0.95
- 0.98

No, the answer is incorrect.
Score: 0
Accepted Answers:
0.92