Assignment 11

Due: 2018-12-12, 23:49 IST.

The data for answering this assignment has been provided. As per our records you have not submitted this assignment.

1. Enter data definitions to associate with:
   a. Traffic-based model
   b. Land use-based model

   a. Yes
   b. No
   c. Can’t say

   Accepted Answers: 2

2. Which of the following is an open economic model?
   a. Commodity based model
   b. Four stage model
   c. Behavioral model

   a. Yes
   b. No
   c. Can’t say

   Accepted Answers: 3

3. Freight lines are assumed to travel between using:
   a. Volume factor
   b. Weight factor
   c. Carrying capacity factor
   d. Mixed factor

   a. Yes
   b. No
   c. Can’t say

   Accepted Answers: 2

4. What is the optimal lot size of a company given: Annual demand ~ 5000 units, Ordering cost per lot ~ Rs. 500, Holding cost ~ Rs. 5 per unit, Cost per item ~ Rs. 55?

   a. 20
   b. 40
   c. 60
   d. 80

   Accepted Answers: 2

5. A city has two industries namely coal and electricity. To produce 1 MW of power from coal and 1 MW of electricity, 150 MW of coal and 150 MW of electricity. How much electricity should be produced to meet someone demand of 150 MW of coal and 150 MW of electricity?

   a. 100 MW
   b. 150 MW
   c. 200 MW
   d. 250 MW

   Accepted Answers: 2

6. Following is the cost matrix of a Transportation Problem:

   
<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25</td>
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<tr>
<td>B</td>
<td>15</td>
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<tr>
<td>C</td>
<td>20</td>
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<td>35</td>
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<tr>
<td>D</td>
<td>25</td>
<td>30</td>
<td>35</td>
<td>40</td>
</tr>
</tbody>
</table>

   Demand: 100

   Calculate the initial basic feasible solution using North-West corner rule, Least Cost method & Vogel's approximation method. Using the above methods what is the lowest initial basic feasible solution obtained?

   a. 1000
   b. 1200
   c. 1500
   d. 2000

   Accepted Answers: 2

7. Following is the initial basic feasible solution obtained:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<tbody>
<tr>
<td>a</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>b</td>
<td>20</td>
<td>15</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

   a. Yes
   b. No
   c. Can’t say

   Accepted Answers: 2

8. A scheme needs to step through cities A, B, C, D and E in the next. He wants to find that the most efficient route among these steps. Below is a chart of the cost between each of the steps. What is the most efficient route?

   a. A-B-C-D-A
   b. A-C-B-D-A
   c. A-B-C-D-E
   d. A-C-B-D-E

   Accepted Answers: 2