

Unit 5 - Week 4

Course outline

How does an NPTEL online course work?

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Week 2

Week 3

Week 4

● Facility Planning

● Factors Affecting Plant Location

○ Plant Location: Case Study on Uttarakhand

● Location Evaluation Methods-I

○ Location Evaluation Methods-II

○ Quiz : Assignment 4

○ Solution For Assignment 4

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WEEKLY FEEDBACK

Assignment 4

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

Due on 2020-02-26, 23:59 IST.

1) The assumption (s) considered during cost-volume analysis is (are); 1 point

- Fixed cost is constant
 Variable costs are linear
 Output can be closely estimated
 All of these

No, the answer is incorrect.
Score: 0

Accepted Answers:
All of these

2) The correct statements in context of Factor-Rating Method are; 1 point

- 1 The method is useful for service and industrial locations
2 Rates locations using factors
3 Decision based on quantitative and qualitative inputs

- 1 and 2
 2 and 3
 1 and 3
 1, 2 and 3

No, the answer is incorrect.
Score: 0

Accepted Answers:
1, 2 and 3

3) The steps involved in Factor-Rating Method are given below; 1 point

- 1 Score each location on each factor
2 Assign weights to each factor
3 Multiply the weight and score and sum for each location

Arrange the steps in proper sequence.

- 1-2-3
 2-1-3
 3-2-1
 2-3-1

No, the answer is incorrect.
Score: 0

Accepted Answers:
2-1-3

4) The methods involved in transportation model are; 1 point

- Least cost method
 North-west corner method
 Column minima method
 All of these

No, the answer is incorrect.
Score: 0

Accepted Answers:
All of these

5) In the center of gravity method of location evaluation, decision is based on minimum distribution costs. 1 point

- True
 False

No, the answer is incorrect.
Score: 0

Accepted Answers:
True

6) Centre of gravity method is used for finding location of single facility serving several destinations. 1 point

- True
 False

No, the answer is incorrect.
Score: 0

Accepted Answers:
True

7) There are three locations X, Y and Z and four factors, the score and weight assigned to each location and each factor, is shown in Table. 1 point

Factor	Weight	X	Y	Z
Cost	0.3	10	9	7
Proximity to source	0.2	7	3	10
Taxes	0.4	7	5	10
Labor	0.1	6	8	5

Determine the BEST location (s) for the plant using factor rating method.

- X
 Y
 Z
 All of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
Z

8) What is (are) the reason (s) leading to requirement of a new plant location; 1 point

- Socio-political and legal changes
 To expand into new target market
 Changes in availability of resources
 All of the above

No, the answer is incorrect.
Score: 0

Accepted Answers:
All of the above

9) The center of gravity method of location evaluation requires; 1 point

- 1 Location of existing destinations (markets, retailers etc.)
2 Volume to be shipped
3 Shipping distance

- 1 and 2
 1 and 3
 2 and 3
 1, 2 and 3

No, the answer is incorrect.
Score: 0

Accepted Answers:
1, 2 and 3

10) Four cities with volume of demand and X, Y coordinates are given in Table. 1 point

Location	Volume	X-Coordinate	Y-Coordinate
Ahmedabad	200	40	130
Lucknow	100	90	110
Delhi	100	130	130
Hyderabad	200	60	40

Find out the coordinates (X, Y) of the location for installing a warehouse to supply the demand to these cities by minimizing the total distance using center of gravity method.

- (96.6, 70.0)
 (70.0, 96.6)
 (73.0, 94.6)
 (94.6, 73.0)

No, the answer is incorrect.
Score: 0

Accepted Answers:
(70.0, 96.6)