Oregon TECH

👤 Anil Coklar ▾

🏠   Course Materials   Assessments   **Review Test Submission: Quiz #5 Su18**

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User	Anil Coklar
Course	H_CST 211: Data Structures
Test	Quiz #5 Su18
Started	8/8/18 6:06 PM
Submitted	8/8/18 6:21 PM
Status	Completed
Attempt Score	Grade not available.
Time Elapsed	14 minutes out of 15 minutes
Results Displayed	All Answers, Submitted Answers, Correct Answers, Feedback, Incorrectly Answered Questions

Question 1

0 out of 10 points

What is the cost of finding the Minimum Spanning Tree (MST) of a graph?

Selected Answer: ❌ 4. $O(n \log n)$

Answers:
1. $O(1)$

2. $O(\log n)$

✅ 3. $O(n)$

4. $O(n \log n)$
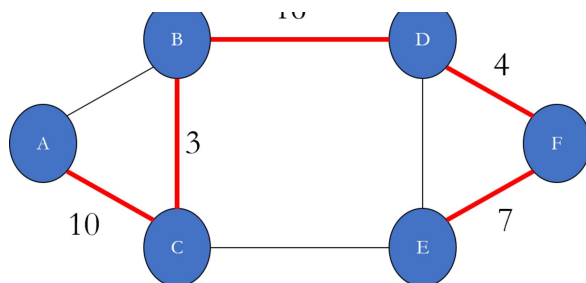
5. $O(n^2)$

6. $O(n!)$

Question 2

10 out of 10 points

The Minimum Spanning Tree (MST) of the graph contains the edges { (A, C), (B, C), (B, D), (D,F), (E,F) } with the associated labeled weight edges. The MST weight sum is 40.

What is the minimum possible sum of **ALL** edges in this graph?

16

Selected Answer: ✓ 97

Answers: 96

                   ✓ 97

                  98

                  95

Response   The missing edges would be a minimum of +1 each over the current MST path for the
Feedback: MST to be true. Therefore, all all the edges up and you get 97.

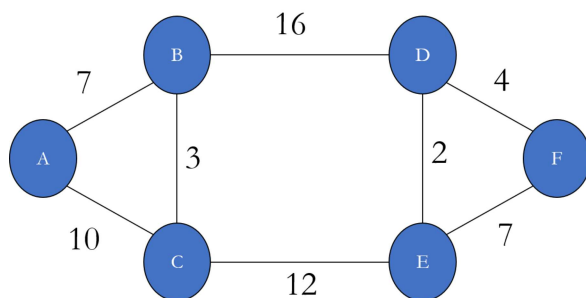## Question 3   40 out of 40 points

Find the minimum spanning tree (MST) of the following graph.

Select the edges that are part of this MST.

Selected Answers: ✗ (B, D)

                  ✓ (A, B)

                  ✓ (D, E)

                  ✓ (D, F)

                  ✓ (B, C)

                  ✓ (C, E)

Answers: (B, D)

                  ✓ (A, B)

                 (A, C)

                 (E, F)

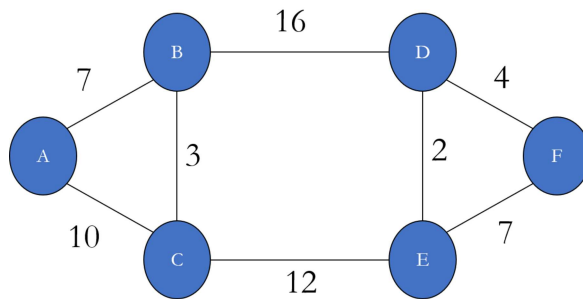   ✓ (D, E)

                  ✓ (D, F)

                  ✓ (B, C)

✅ (C, E)

Response Feedback: { (A, B), (B, C), (C, E), (D,E), (D,F) }

Question 4

16 out of 40 points

Find the **max**imum spanning tree (MST) of the following graph.

Select the edges that are part of this MST.

❌ (D, E)

✅ (C, E)

✅ (B, D)

Answers: (B, C)

(D, E)

✅ (C, E)

(A, B)

✅ (E, F)

✅ (A, C)

✅ (D, F)

✅ (B, D)

Wednesday, August 8, 2018 6:21:55 PM PDT

← **OK**