CSCI 1900 - Homework 19 - B

**Sections 11.4, 11.5: Minimum Spanning Trees** *(8)*

6

B

3

3

D

2

2

A

5

C

**Graph 1**

5

E

4

F

F

I

C

A

8

3

4

4

2

2

7

6

2

5

4

H

E

5

7

D

B

4

3

4

**Graph 2**

J

G

6

1. Use Prim’s algorithm to determine the minimum spanning tree for **Graph 1**. Show your result as a graph, labeling each edge consequently as you added them. Give the total weight. Begin at vertex A. (2)
2. Use Prim’s algorithm to determine the minimum spanning tree for **Graph 2**. Show your result as a graph, labeling each edge consequently as you added them. Give the total weight. Begin at vertex A (2)
3. Use Kruskal’s algorithm to determine the minimum spanning tree for **Graph 1**. Show your result as a graph, labeling each edge consequently as you added them. Give the total weight. (2)
4. Use Kruskal’s algorithm to determine the minimum spanning tree for **Graph 2**. Show your result as a graph, labeling each edge consequently as you added them. Give the total weight. (2)