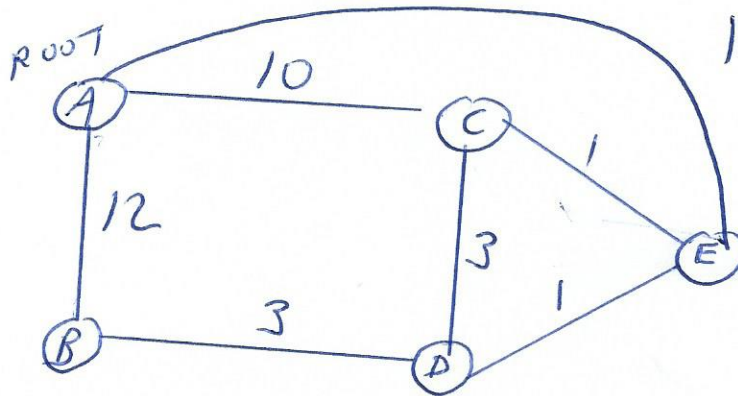


Answer all questions. Total is 26 pnts. Q1:10 pnts, Q2-5: 4 pts each

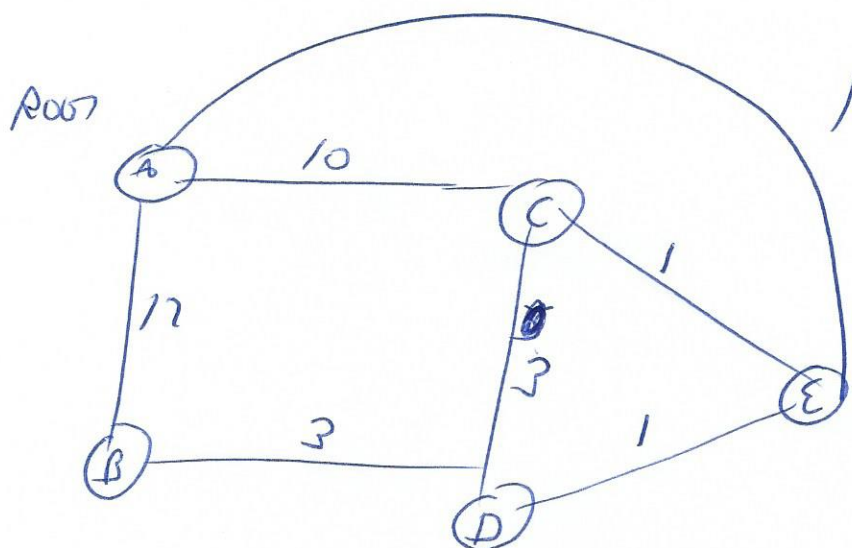
1. Create the algorithm routing table using the Ford Fulkerson algorithm. The metric is shortest distance. Node A is the root node. Label the columns B,C,D,E from left to right.



2. What is the one word phenomena that lowers thruput for heavy loads in CSMA/CD networks like early versions of Ethernet?
3. Match:

(a) 802.3 Ethernet	1) wireless LAN
(b) 802.11 WiFi	2) 10 meter range
(c) 802.15 Bluetooth	3) wired LAN
4. Which is more likely to be used inside of a data center: Infiniband or MPLS?
5. In a layered protocol such as OSI can the transport layer in one node talk to the transport layer in a different node directly? If not what is the path of communication?

**Have a Good Summer!**



Ford fulkerson

Initial	B ( $-\infty, \infty$ )	C ( $-\infty, \infty$ )	D ( $-\infty, \infty$ )	E ( $-\infty, \infty$ )
1	(A, 12)	(A, 10)	(A, 3)	(A, 1)
2	(A, 12)	(E, 2)	(E, 2)	(A, 1)
3	(D, 3)	(E, 2)	(E, 2)	(A, 1)
4	(D, 3)	(E, 2)	(E, 2)	(A, 1)

identical so stop

**2<sup>nd</sup> Exam      ESE/CSE 346    T. Robertazzi      Spring 2016**

Answer all questions. Total is 26 pnts. Q1:10 pnts, Q2-5: 4 pts each

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1. Create the algorithm routing table using the Ford Fulkerson algorithm. The metric is shortest distance. Node A is the root node. Label the columns B,C,D,E from left to right
2. What is the one word phenomena that lowers thruput for heavy loads in CSMA/CD networks like early versions of Ethernet?

**Collisions.**

3. Match:

- |                      |     |                   |
|----------------------|-----|-------------------|
| (a) 802.3 Ethernet   | ->3 | 1) wireless LAN   |
| (b) 802.11 WiFi      | ->1 | 2) 10 meter range |
| (c) 802.15 Bluetooth | ->2 | 3) wired LAN      |

4. Which is more likely to be used inside of a data center: Infiniband or MPLS?

**Infiniband (MPLS is for wide area connections, not as a local network).**

5. In a layered protocol such as OSI can the transport layer in one node talk to the transport layer in a different node directly? If not what is the path of communication?

**Not directly, the communication path goes from the transport layer, down the stack to the physical layer, across to the destination physical layer and up the destination stack to the destination transport layer.**

**Have a Good Summer!**