

CSE395/CSE323 Term Test #2
Full Marks: 20 Time: 35 minutes

1. Suppose your organization uses the network ID of 172.200.0.0/16 . The network needs to be partitioned into 11 subnets. Answer the following questions:
- For the subnets, how many bits must be borrowed from the host address bits?
 - What is the subnet mask for these subnets, written in decimal?
 - What is the CIDR notation for the last (11th) subnet's network ID?
 - In total, how many host addresses will be lost for this subnetting process?
 - What is the range of host addresses for the last (11th) subnet?

1+2+
2+1+2

2. IP/Network layer provides best effort service – write two properties of best effort service. Write the name of another protocol which provides best-effort service.

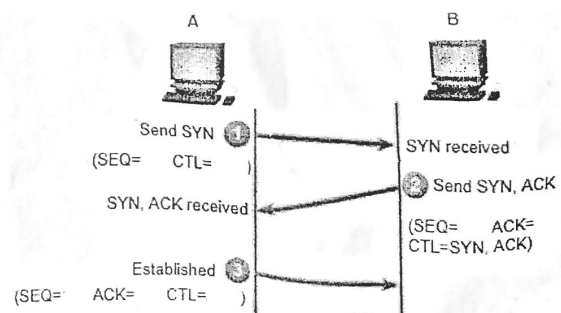
3

3.

00-07-E9-42-AC-28	00-07-E9-00-BC-70	192.168.1.27	192.168.1.7	1022	8080	Data	CRC
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2+1

Consider the above frame. Write the names of each of the fields. What is the source socket values (a socket contains the IP address and port number).



4. Consider the 3-way handshake protocol shown in the figure. Fill up the values of missing fields.
5. What is the function of TTL (Time to Live) field in IP header?

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