



VII SEMESTER B. TECH. (INSTRUMENTATION AND CONTROL ENGG.)

END SEMESTER DEGREE EXAMINATION December - 2020

SUBJECT: Computer Networks and Protocol [ICE 4017]

TIME: 3 HOURS

28-12-2020

MAX. MARKS: 50

Instructions to candidates

- Answer **ALL** questions.
- Missing data may be suitably assumed.

- 1A List the different types of services in connection oriented and connection-less service with an example for each.
- 1B With the help of a flowchart, explain different maturity levels of an RFC.
- 1C With an example, briefly explain about different connecting devices used in networking. (2+5+3)
- 2A The inter-network shown in Table 2A has four statically configured routers that share three networks. To reduce the configuration time it was recommended to go for dynamic routing (RIP). Configure and verify the routers with suitable protocol that uses composite metric. Draw the network diagram for the same.

Table 2A

Router	Network address	Interface	Address
3501	172.18.10.0	S0	172.18.10.1
501A	172.18.10.0	S0	172.18.10.2
3501A	172.18.20.0	S1	172.18.20.1
3501A	172.18.30.0	E0	172.18.30.1
3501B	172.18.30.0	E1	172.18.30.2
3501C	172.18.20.0	S1	172.18.20.2

- 2B Differentiate distance vector routing and link state routing techniques.
- 2C Compare all the features of Static and Dynamic routing. (5+2+3)
- 3A Explain four different types of addressing used on Internet that is associated with each layer of TCP/IP protocol suite. Give one example for each
- 3B An organization is granted with the block 130.34.12.64/26. The organization needs four subnetworks, each with an equal number of hosts. Design the subnetworks and find the information about each network. Diagrammatically show the representation. (5+5)

- 4A Illustrate how IP packets are delivered in a small network.
- 4B From Fig Q4B write the routing tables for router R3 if R1 receives a packet with destination address 167.24.160.5. Show how the packet is forwarded.

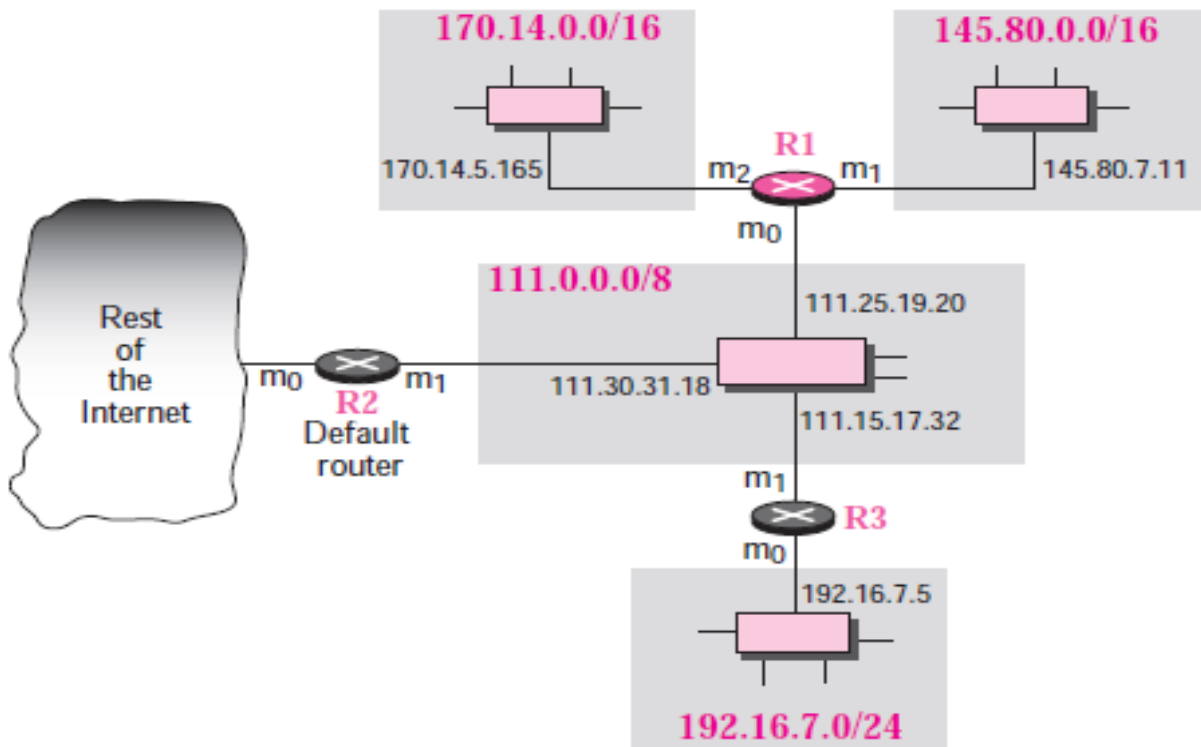


Fig Q4B

- 4C Write a note about full virtualization and para virtualization. (3+3+4)
- 5A What is cloud computing? List its advantages and disadvantages.
- 5B Illustrate SAAS, PAAS and HAAS. List any two advantages and disadvantages for each service.
- 5C Explain about Amazon Elastic block store package. (2+6+2)