



### SEVENTH SEMESTER B. TECH. (INSTRUMENTATION AND CONTROL ENGG.)

### END SEMESTER DEGREE EXAMINATIONS, DECEMBER – 2018

### SUBJECT: COMPUTER NETWORKS AND PROTOCOL [ICE 4017]

**TIME: 3 HOURS**

**MAX. MARKS: 50**

#### Instructions to candidates

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

- 1A Brief different service primitives for implementing a simple connection oriented service. 3
- 1B With the help of a flow diagram, explain different maturity levels of request for comment. 4
- 1C In a simple point to point connection, how does IP routing take place? Explain with an example. 3
- 2A Which type of address is used in data link layer? Explain all the internet addressing types. 4
- 2B With the help of a neat diagram, explain different classes of address available in IPV 4 protocol. 4
- What is the Net ID range for each class, total number of address in each class and blocks?
- 2C An organization is granted the block 120.14.25.60/26. The organization needs two subnetworks, 2
- each with equal number of hosts. Design the subnetworks and find the information about each network.
- 3A Explain Static and Dynamic routing. List two advantages and disadvantages of each of them. 3
- 3B The inter-network shown in Table 3B has four statically configured routers that share three 4
- networks. Draw the network diagram using RIP protocol.

Table 3B

Router	Network address	Interface	Address
3501	172.18.10.0	E0	172.18.10.1
3501A	172.18.10.0	S0	172.18.10.2
3501A	172.18.20.0	E1	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

- 3C Write a brief note about Route poisoning. How can the route poisoning problem be overcome? 3
- 4A Illustrate how IP packets are delivered in a small network. 3
- 4B Brief various special address available in IPV 4 protocol. 2
- 4C From fig 4C write the routing tables for router R3. R1 receives a packet with destination address 2
- 167.24.160.5. Show how the packet is forwarded.

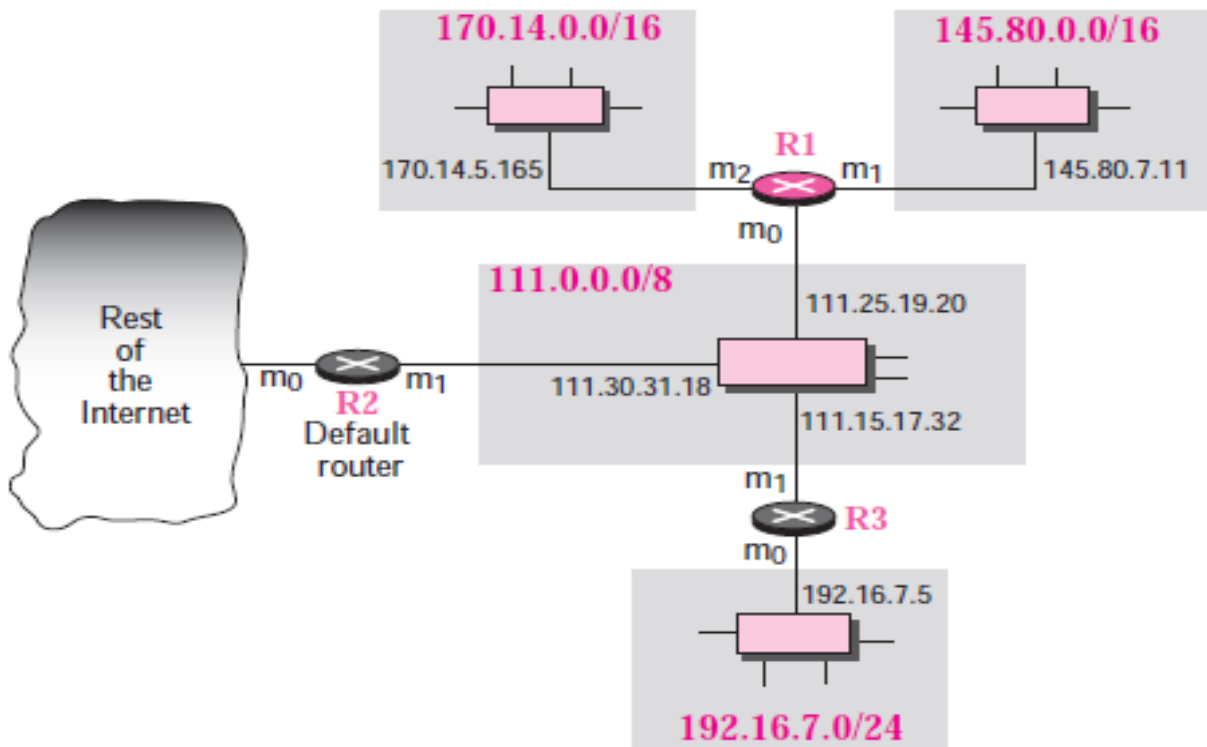


Fig. 4C

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

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