



VI SEMESTER B.TECH (ELECTRICAL & ELECTRONICS ENGINEERING)

MAKE-UP EXAMINATIONS, JUNE 2018

SUBJECT: COMPUTER NETWORKS [ELE 4017]

REVISED CREDIT SYSTEM

Time: 3 Hours

Date: 20 JUNE 2018

Max. Marks: 50

Instructions to Candidates:

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

- 1A.** Draw the comparison diagram of OSI and TCP/IP. Explain TCP/IP protocol suite (05)
- 1B.** Explain the functionalities of various organizations involved in the administration of Internet with neat diagram (05)
- 2A.** Design the routing table for router R1 shown in Figure 2A in classfull addressing (Consider host 194.17.21.16 also as destination) (05)

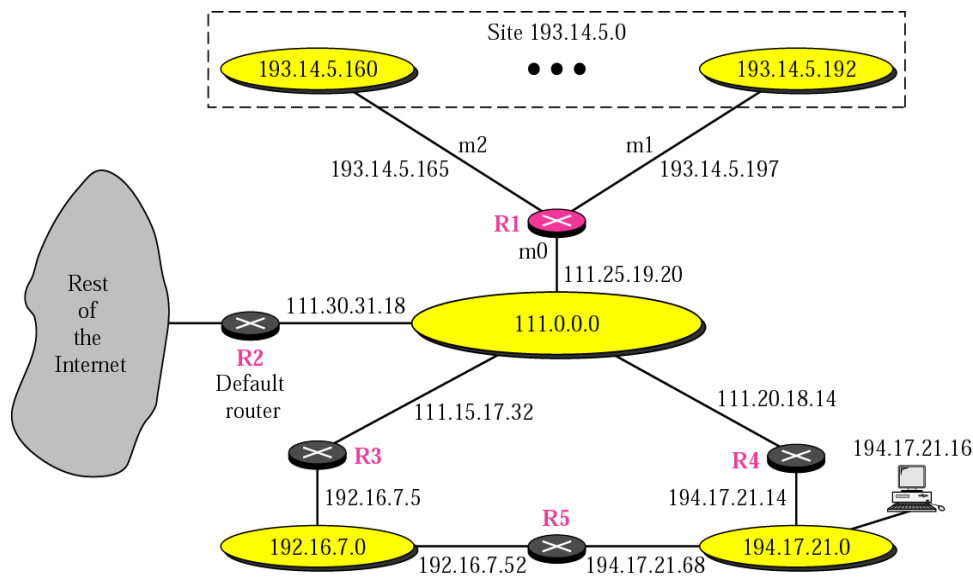


Figure 2A

(05)

- 2B.** An organization is granted 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 (05)
- 3A.** Explain the various techniques used to avoid network loops that occur when RIP protocol is used for router configuration (05)
- 3B.** Differentiate bridges and switches when used in layer 2 switching. Also differentiate layer 2 and layer 3 broadcast with one example for each (05)

- 4A.** Explain the need for using Spanning Tree Protocol in a network. Also explain the procedure for choosing root bridge, root port and designated port. **(05)**
- 4B.** Define virtualization? Brief about the key properties of virtualization **(05)**
- 5A.** Explain server multihoming with neat diagrams **(03)**
- 5B.** Explain the intranet server farm in an enterprise datacenter with neat diagram **(04)**
- 5C.** Explain the range of services offered by the cloud vendors **(03)**