

Code: 9A05806**R09**

B.Tech IV Year II Semester (R09) Advanced Supplementary Examinations June/July 2016

INTERNETWORKING WITH TCP/IP

(Computer Science and Engineering)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Describe functions of each layer in the OSI model.
(b) Explain various types of options in IPV4 header.
- 2 (a) Differentiate between the Classless Addressing, Classful Addressing and Special Addressing.
(b) What is sub-netting? Explain with an example.
- 3 (a) Enumerate two modules of ICMP package.
(b) Make a table showing which ICMP messages are sent by routers, which are sent by the non-destination hosts and which are sent by the destination hosts.
- 4 Discuss the idea of distance vector routing and explain how it uses the Bellman-Ford algorithm to update routing tables with an example.
- 5 (a) Compare the features of TCP with that of UDP.
(b) With a neat diagram, discuss the use of each field in the UDP packet header.
- 6 (a) Discuss how TCP implements flow control in which the receive window controls the size of the send window with an example.
(b) Discuss about the congestion control in TCP header.
- 7 (a) What is FTP? What are the different types of connections used in FTP?
(b) Explain the communication process used in FTP.
- 8 (a) Explain how the options in IPV4 header are implemented using the extension headers in IPV6.
(b) Make a table to compare and contrast error reporting messages in ICMPV6 with error reporting messages in ICMPV4.
