

Code No: **R32041****R10****Set No. 1****III B.Tech II Semester Supplementary Examinations, April - 2018****COMPUTER NETWORKS**

(Common to Electronics and Communication Engineering and Electronics and Computer Engineering)

Time: 3 hours**Max. Marks: 75****Answer any FIVE Questions****All Questions carry equal marks**

- 1 a) Compare OSI reference model with TCP/IP model. [8M]
b) Explain the functions of session, presentation and application layer in detail. [7M]
- 2 a) With neat sketch explain the principle of Coaxial cables [8M]
b) Explain the comparisons between Narrow band and broad band ISDN. [7M]
- 3 a) Discuss the error detection mechanism in CRC with the help of an example? [8M]
b) What is the significance of Flow control Mechanism? Explain how it is achieved by Sliding window protocol. [7M]
- 4 a) Explain the differences between Persistent and non-persistent CSMA protocols of MAC sub layer [8M]
b) Explain the differences between Simple Bridge and Transparent Bridge [7M]
- 5 a) Compare the Characteristics of Circuit switched networks, Datagram networks and Virtual circuit networks [8M]
b) With neat example explain the Shortest path routing [7M]
- 6 a) Discuss the general Principles of Congestion control Algorithm [8M]
b) Explain the various broadcasting routing algorithms [7M]
- 7 a) Discuss briefly about ATM AAL Layer Protocol [8M]
b) With a neat sketch, explain the UDP header format [7M]
- 8 a) Explain in detail about communication security and authentication with neat example [8M]
b) Describe the architecture of WWW with a neat sketch. What is the significance of static and dynamic web documents? Explain [7M]
