

III B. Tech II Semester Supplementary Examinations, November/December-2016
COMPUTER NETWORKS
 (Common to CSE and IT)

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
 2. Answering the question in **Part-A** is compulsory
 3. Answer any **THREE** Questions from **Part-B**

PART -A

- 1 a) List two advantages and disadvantages of having international standards for network, Protocols? [4M]
- b) Which switching method allows real-time data transfer? [3M]
- c) Data link protocols almost always put the CRC in a trailer, rather than in a header. Why? [5M]
- d) What is slotted ALOHA? Mention its advantages. [3M]
- e) What is the baud rate of the standard 10-Mbps Ethernet? [3M]
- f) Describe why HTTP is designed as a stateless protocol. [4M]

PART -B

- 2 a) Write short notes on NSFNET. [4M]
- b) Two networks each provide a reliable connection oriented service. One of them offers a reliable byte stream and other offers a reliable message stream. Are they identical? Justify. [8M]
- c) Discuss the “Bad Timing” problem of OSI reference model. [4M]
- 3 a) Compare and contrast synchronous time division multiplexing and statistical time division multiplexing. [8M]
- b) Explain in detail about the Virtual Circuit Networks. [8M]
- 4 a) Briefly discuss about CRC checker. [3M]
- b) PPP (Point to Point Protocol) is based closely on HDLC, which uses bit stuffing to prevent accidental flag bytes within the payload from causing confusion. Give reasons why PPP uses character stuffing instead. [8M]
- c) Draw and explain about HDLC protocol. [5M]
- 5 a) Discuss about congestion control in Virtual Circuit subnets. [8M]
- b) Explain in detail the working of CSMA. [8M]
- 6 a) What are common Ethernet implementations? Discuss about the MAC sub layer? [8M]
- b) Discuss the MAC layer functions of IEEE 802.11. [8M]
- 7 a) Discuss the protocol stack of WAP. [8M]
- b) Explain HTTP Transaction with an example. [8M]

