| BICS-017 |

B.Tech. – VIEP – COMPUTER SCIENCE AND ENGINEERING (BTCSVI)

Term-End Examination

June, 2015   □□6 86

BICS-017 : COMPUTER NETWORKS

Time : 3 hours   *Maximum Marks : 70*

Note : *Attempt any **seven** questions. All questions carry equal marks.*

1. (a) Explain OSI reference model.   5

    (b) Explain in brief on any five application layer protocols.   5

2. (a) What is an IP address ? Explain on Class-A, Class-B, and Class-C IP addresses.   7

    (b) Explain in brief on Network Topologies.   3

3. Explain in detail the IPv4 and IPv6 packet header formats.   10

4. (a) What do you mean by Switching and Routing ?   3

    (b) What is a port in a network context ? Write any six standard network ports.   7

5. Explain about multiplexing and demultiplexing used in transport layer.   10

6. (a) State the various design issues for the data link layer. 7

(b) What are IEEE standards ? 3

7. What do you mean by congestion control ? Explain Leaky Bucket algorithm and Token Bucket algorithm. *2+8=10*

8. (a) Explain TCP header and the workings of the TCP protocol. 5

(b) Explain ARP and RARP protocols. 5

9. (a) What is meant by multicast routing ? Explain. 5

(b) How does DNS work ? Explain. 5

10. Write short notes on any *two* of the following : *2×5=10*

(a) Network Management

(b) Streaming Audio

(c) ATM Networks