

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

Term-End Examination

June, 2014

00537

BICS-017 : COMPUTER NETWORKS

Time : 3 hours

Maximum Marks : 70

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

1. (a) Discuss the different layers of TCP/IP protocol. 6
- (b) What is the relationship between Services and Protocols ? Explain. 4
2. (a) Describe the principles of Application Layer Protocol. 4
- (b) Define the term Socket. List and explain the different types of sockets. 6
3. (a) Explain in detail how TCP provides flow control. 5
- (b) Explain about the structure of UDP Header with diagram. 5

4. (a) What is Routing ? Differentiate between Unicast and Multicast Routing. 5
- (b) Compare the Header field of IPv4 and IPv6 with respect to functionality of each field. 5
5. Draw and describe different fields of ATM cell format. Also list various functions performed by ATM adaptation layer. 4+6=10
6. (a) What is Hub ? Explain the purpose of Hub, Switches and Gateways in computer networks. 7
- (b) Explain the purpose of ARP. 3
7. (a) State and explain the various services provided by a data link layer. 6
- (b) What is piggybacking ? State drawbacks of Stop and Wait protocols. 2+2=4
8. What is Multi-media ? What are the steps followed for streaming Audio and Video ? 2+8=10
9. (a) What is the difference between Cryptography and Secured system ? 5
- (b) Explain about public key cryptography. 3
- (c) What do you mean by on-line security ? 2

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

- (a) Ethernet
 - (b) Integrity
 - (c) PPP
-