



Reg. No. : .....

Name : .....

**Eighth Semester B.Tech. Degree Examination, May 2018 .**  
**(2013 Scheme)**  
**13.803 : COMPUTER COMMUNICATIONS (T)**

Time : 3 Hours

Max. Marks : 100

**PART – A**

Answer for **all** questions. **Each** question carries **2** marks.

1. Differentiate between connectionless service and connection oriented services.
2. What is a protocol ?
3. How the TCP manages the flow control services ?
4. What is tunneling ? When it occurs ?
5. Describe the functions of ARP.
6. Give the functions of packet scheduler.
7. How the Ethernet Efficiency has computed ?
8. Why link layer switches are superior over broadcast links ?
9. How a packet filter provides security to the system ?
10. Describe two important concepts of SSL. **(10×2=20 Marks)**

**PART – B**

Answer **any one** question from **each** Module. **Each** full question carries **20** marks.

**Module – I**

11. a) How does OSI model satisfies the concept of layering structure ? Explain. **12**
- b) Explain the features of UDP for connectionless data transport. **8**

OR

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12. a) Draw the structure of TCP segment and explain the features of TCP. 12  
 b) How the multiplexing and de-multiplexing has carried out in transport layer ? Explain with the help of necessary diagrams. 8

### Module – II

13. a) Differentiate between virtual circuit and datagram networks. 10  
 b) Give the features of IP Version 6. 5  
 c) How the ICMP messages are useful for error reply ? Discuss different types error messages. 5

OR

14. a) Discuss about any two types of routing algorithms. 10  
 b) Give the routing policy of Border Gateway Protocol (BGP). 5  
 c) What is uncontrolled flooding ? How it can be managed ? 5

### Module – III

15. a) Briefly discuss about three types of error detection and correction technique used at data link layer. 15  
 b) How the MPLS improves the IP router forwarding speed ? Explain. 5

OR

16. a) How Address Resolution Protocol (ARP) resolves the IP address to MAC address ? Explain with one appropriate example. 10  
 b) Give the Ethernet frame structure and describe about each field. 10

### Module – IV

17. a) Why the Message Digest algorithms are superior as compared with RSA and DES ? 10  
 b) How the IPSec provides complete security for the total layers ? Explain. 10

OR

18. a) Briefly discuss about main three types of authentication protocols. 12  
 b) What is VPN ? Explain. 8

(4×20=80 Marks)