

Roll No. ....

**24328**

**B. Tech. (CSE) 6th Semester  
Examination – May, 2015**

**COMPUTER NETWORK**

**Paper : IT-305-F**

*Time : Three Hours ]*

*[ Maximum Marks : 100*

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*Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.*

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**Note :** Attempt *five* questions in all, selecting *one* question from each Sections. Question No. 1 is *compulsory*. All questions carry equal marks.

1. Explain the following :

5 × 4 = 20

- (a) ARP
- (b) Proxy Server
- (c) Token Ring
- (d) Types of Network

### SECTION – A

2. (a) What is ARPANET ? Explain in detail. 10
- (b) Explain different types of Topologies with their advantages and disadvantages. 10
3. Describe the working of OSI model with Proper Diagram. 20

### SECTION – B

4. (a) Differentiate between OSI and TCP/IP Model. 10
- (b) Explain the IP addressing and IP Address Classes. 10
5. Explain various Application Layer Protocols of TCP/IP. 20

### SECTION – C

6. (a) Explain LAN Interconnecting devices in detail. 10
- (b) What do you mean by CSMA collision detection. Explain ? 10
7. Explain Routing and Congestion control in detail. 20

## SECTION – D

8. (a) What is a Remote Monitoring Technique ?  
Explain in Detail. 10
- (b) What do you mean by Synchronous Digital Hierarchy/Synchronous Optical Network ?  
Explain. 10
9. Explain the following : 5 × 4 = 20
- (i) ATM
  - (ii) Firewall
  - (iii) VLAN
  - (iv) Windows NT/2000
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