

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 :**

**$5 \times 4 = 20$**

- (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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