

No. of Printed Pages : 4  
Roll No. ....

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**5th Sem / Branch : Computer, IT, GE  
Sub. : Computer Networks**

Time : 3Hrs.

M.M. : 100

**SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory  
(10x1=10)

- Q.1 A \_\_\_\_\_ is a set of rules that governs data communication. (CO-1)  
a) RFC                    b) Server  
c) Standard              d) Protocol
- Q.2 A device that connects networks with different protocols (CO-6)  
a) Switch                b) HUB  
c) Gateway                d) Proxy Server
- Q.3 An interconnected collection of piconet is called \_\_\_\_\_. (CO-2)  
a) Scatternet            b) Micronet  
c) Mininet                d) Multinet
- Q.4 Couumnication channel is shared by all the machines on the network in \_\_\_\_\_. (CO-1)  
a) Anycast              b) Broadcast  
c) Multicast             d) Unicast
- Q.5 HTTP is a \_\_\_\_\_ protocol. (CO-6)  
a) Transport layer        b) Application layer  
c) Network layer          d) DLL

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Q.6 If you wanted to have 12 subnets with A class C network IP, which subnet mask would you use? (CO-6)

- a) 255.255.255.252      b) 255.255.255.255  
c) 255.255.255.240      d) 255.255.255.248

Q.7 Which multiple access technique is used by IEEE 802.11 standard for wireless LAN? (CO-2)

- a) CDMA                b) ALOHA  
c) CSMA/CD            d) CSMA/CA

Q.8 Any Ipv6 address size is \_\_\_\_\_. ? (CO-6)

- a) 128 bits            b) 64 bits  
c) 16 bits             d) 32 bits

Q.9 Which is not an objective of network security? (CO-5)

- a) Identification        b) LOCK  
c) Authentication      d) Access Control

Q.10 The information that gets transformed in encryption is \_\_\_\_\_. (CO-5)

- a) Plain text            b) Parallel text  
c) Encrypted text      d) Decrypted

**SECTION-B**

**Note:** Objective type questions. All questions are compulsory.  
(10x1=10)

- Q.11 Connection oriented service is less reliable than connection less. (True/False) (CO-1)
- Q.12 In 10 Base T, the T represents to \_\_\_\_\_. (CO-1)
- Q.13 BSS stands for \_\_\_\_\_. (CO-2)
- Q.14 The first layer from top is OSI model is \_\_\_\_\_. (CO-6)
- Q.15 Client/Server model is more secure than Peer to Peer model. (True/False) (CO-1)

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- Q.16 Expand CSMA/CD. (CO-1)  
 Q.17 Identify the class of IP address 156.72.15.1. (CO-6)  
 Q.18 Browser uses \_\_\_\_ protocol to access web page. (CO-6)  
 Q.19 Expand CRC. (CO-3)  
 Q.20 IP address 127.0.0.1 is a loopback address? (True/False) (CO-3)

### SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Explain in brief the network computing models. (CO-1)  
 Q.22 Compare LAN, MAN and WAN on speed of transmission, reliability, design complexity, ownership & scale. (CO-6)  
 Q.23 Explain three network services for users in brief. (CO-1)  
 Q.24 Explain Circuit Switching with its merits and de-merits. (CO-1)  
 Q.25 Write five differences between OSI and TCP/IP reference models. (CO-6)  
 Q.26 Calculate the requirement of links and ports at each node if someone wants to connect six nodes using mesh topology. (CO-6)  
 Q.27 Briefly explain the function of PING, IPCONFIG AND NETSTAT. (CO-4)  
 Q.28 Draw the Ipv4 header and explain in brief the function of each field. (CO-6)  
 Q.29 Calculate the sub network address if the destination address is 19.30.80.5 and the subnet mask is 255.255.192.0? (CO-6)

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- Q.30 List the various traditional Ethernet standards. Explain their features. (1+4) (CO-4)  
 Q.31 Name the connecting/interconnecting devices based on layers of OSI models. Explain the working of any one of them. (2+3) (CO-6)  
 Q.32 Define Cryptography. Explain symmetric Encryption with suitable diagram. (CO-5)  
 Q.33 Explain the handshaking process between client and DHCP server. (CO-3)  
 Q.34 Explain the function of Gateway in brief. (CO-4)  
 Q.35 Write various applications of Bluetooth. (CO-2)

### SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 Explain the architecture of WLAN (IEEE 802.11) Also write the advantages of WLAN over Wired LAN. (7+3) (CO-2)  
 Q.37 Explain switching techniques in details with their merits and demerits. (CO-1)  
 Q.38 Write note on followings:  
   a) Fast Ethernet & Gigabit Ethernet (5) (CO-1)  
   b) Workgroup & Domain networking (5) (CO-3)

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