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## **5th Sem / Comp, IT, GE**

### **Subject:- Computer Networks**

Time : 3Hrs. M.M. : 100

## **SECTION-A**

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

- Q.1 How many layers does OSI Reference Model Has?

  - a) 4
  - b) 5
  - c) 6
  - d) 7

Q.2 \_\_\_\_\_ Provides a connection-oriented reliable service for sending messages

  - a) TCP
  - b) IP
  - c) UDP
  - d) All of the above

Q.3 Which of the following is correct regarding Class B Address of IP address

  - a) Network bit - 14, Host bit - 16
  - b) Network bit - 16, Host bit - 14
  - c) Network bit - 18, Host bit - 16
  - d) Network bit - 12, Host bit - 14

Q.4 DHCP Server provides \_\_\_\_\_ to the client.

  - a) Protocol
  - b) IP Address
  - c) MAC Address
  - d) Network Address

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- Q.5 \_\_\_\_\_ is used to test connectivity between two computer systems.

  - a) IPCONFIG
  - b) NETSTAT
  - c) WIRESHARK
  - d) PING

Q.6 Which of the following is not a type of Ethernet standard.

  - a) Traditional Ethernet
  - b) Fast Ethernet
  - c) Gigabit Ethernet
  - d) Super Ethernet

Q.7 What is the first octet range for a class C IP address?

  - a) 192-255
  - b) 192-223
  - c) 192-226
  - d) 128-191

Q.8 Which of the following is not a trouble shooting tool.

  - a) PING
  - b) NETSTAT
  - c) ROUTERPRINT
  - d) NFC

Q.9 The \_\_\_\_\_ layer is the layer closest to the transmission medium.

  - a) Transport
  - b) Network
  - c) Data link
  - d) Physical

Q.10 What is the default mask for a class C Network?

  - a) 255.255.255.1
  - b) 255.255.255.0
  - c) 255.255.255.254
  - d) 255.255.255.255

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## **SECTION-B**

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

Q.11 Define topology.

Q.12 Hubs are used in \_\_\_\_\_ topology.

Q.13 Email is the part of \_\_\_\_\_ layer in OSI model?

Q.14 Class B has \_\_\_\_\_ number of bits to identify the host part.

Q.15 What is 10BASE T?

Q.16 Give name of any two Bluetooth devices.

Q.17 What is the use of PING in network troubleshooting.

Q.18 Ipv6 consist of 64 bits. (T/F)

Q.19 OSI model has 7 layers. (T/F)

Q.20 LiFi stands for \_\_\_\_\_.

## **SECTION-C**

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Explain Ipv6 packet format with diagram.

Q.22 What is the need of network layer? Explain in brief.

Q.23 Differentiate between centralized and distributed network computing models.

Q.24 Explain star topology along with its advantages and disadvantages.

Q.25 Briefly explain IEEE 802.3 architecture.

Q.26 What is cryptography. List its various techniques.

Q.27 Explain in brief various standards of Ethernet.

Q.28 Briefly explain Bluetooth architecture.

Q.29 What is Router. Briefly explain its configuration process.

Q.30 Differentiate IPV4 & IPV6.

Q.31 Explain TCP / IP structure.

Q.32 Discuss the working of DHCP.

Q.33 Differentiate between Circuit packet switching.

Q.34 Explain Gigabit Ethernet in brief.

Q.35 Find decimal dotted notation, class, net-id, host-id and network address of following.

a. 10010001 00011000 11001110 01110001

b. 01110000 10001001 11001100 10000111

## **SECTION-D**

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

Q.36 What are various IP address classes? Explain in brief each class.

Q.37 Discuss in brief the functions of various layers of OSI model.

Q.38 Write short note on:-

a) Netstat

b) Workgroup