C1042

MCS-E10

Wireless Networks

Master of Computer Application (MCA)

4th Semester Examination, 2022 (June)

Time : 2 Hours]   **Max. Marks : 80**

Note : This paper is of Eighty (80) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

SECTION–A
(Long Answer Type Questions)

Note : Section 'A' contains Five (05) long answer type questions of Twenty (20) marks each. Learners are required to answer any Two (02) questions only.

(2×20=40)

1. What is Modulation? Briefly explain multiplexing and duplexing.

2. What is OSI networking model? Explain the various layers of OSI model.

3. Briefly explain the difference between OSI and TCP/IP model.

4. What is IP address? Explain the difference between IPv6 and IPv4 addressing with suitable example.

5. What is Internet Protocol? Briefly explain the difference between TCP and UDP.

SECTION–B
(Short Answer Type Questions)

Note : Section 'B' contains Eight (08) short answer type questions of Ten (10) marks each. Learners are required to answer any Four (04) questions only.   (4×10=40)

1. What is DHCP? Explain the difference between Static IP and Dynamic IP address.

2. Explain Network Address Translation (NAT) for IPv4.

3. What is Medium Access Control (MAC) address? Explain the different types of networking devices.

4. Write short notes on :
(a)   Router.
(b)   Firewall.
(c)   Simple Network Management Protocol (SNMP).
(d)   VLAN.

5. Compare FDMA, TDMA and CDMA.

6. Explain the IEEE 802.11 standard.

7. What is the electromagnetic spectrum? Explain.

8. Explain the following terms :

   (a) CIDR

   (b) DNS

   (c) Point-to-Point Protocol.

   (d) VPN.

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