2123

B. Voc. (Hardware & Networking)

1st Semester

HWN-104: Network Fundaments

Time allowed: 3 Hours

Max. Marks: 40

NOTE: *Attempt* <u>*five*</u> *questions in all, including Question No. I which is compulsory and selecting one question from each Unit.*

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I. Write short notes on the following:-
   (a)   LAN/WAN/MAN
   (b)   TCP/IP model
   (c)   Radiowaves and Microwaves
   (d)   MAC Address   (4×2)

UNIT – I

II. Define network topology. Explain various network topologies with diagrams. (8)

III. Explain the following:-
   (a)   Client/server and peer-to-peer network models
   (b)   Server and its types   (2×4)

UNIT – II

IV. Define transmission media. What are its types? Explain guided transmission media with diagrams. (8)

V. Explain OSI reference model with diagram. What are the functions of different layers of OSI reference model? (8)

UNIT – III

VI. Explain the following networking protocols:-
   (a)   FTP
   (b)   Telnet
   (c)   HTTP
   (d)   DHCP   (4×2)

VII. Define network devices. Name various network devices. Explain any four network devices. (8)

UNIT – IV

VIII. Define NIC. Explain working principles of NIC. (8)

IX. Define IP address. Explain format and different classes of IP address. (8)

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