DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE, APRIL - 2025

<u>NETWORK INFRASTRUCTURE MANAGEMENT</u>

[Maximum Marks: **100**]   [Time: **3** Hours]

PART-A
[Maximum Marks: **10**]

I.   (Answer *all* questions in one or two sentences. Each question carries *2* marks)

   1. Define the term UTP.

   2. List any one unbounded media.

   3. Name any two encryption technics.

   4. List the two methods for setting router's clock.

   5. Define Interior Gateway Protocol.   (5 x 2 = 10)

PART-B
[Maximum Marks: **30**]

II.   (Answer *any five* of the following questions.   Each question carries *6* marks)

   1. Describe Bluetooth.

   2. Explain VPN.

   3. Explain the different classes of classful IP address.

   4. Briefly explain Domain Controllers.

   5. Summarize the methods of talking to routers.

   6. Differentiate TCP/IP static and dynamic routing protocols.

   7. Explain Route Control and Redistribution.   (5 x 6 = 30)

PART-C
[Maximum Marks: **60**]
(Answer *one* full question from each Unit. Each full question carries **15** marks)

UNIT – I

III.   a. Discuss Wi-Fi and WiMAX.   (8)

        b. Write a short note on Optical Fiber Cable.   (7)

OR

IV.   a. Discuss the various types of MODEM.   (6)

        b. Explain the working of a Router with the help of necessary diagrams. (9)

UNIT – II

V. a. Discuss steps for installation of active directory. (8)

    b. Explain the concept of system back up. (7)

OR

VI. a. Explain four types of firewalls. (8)

    b. List the advantages of IP security. (7)

UNIT- III

VII. a. Write short note on Router IOS. (7)

    b. Illustrate major EXEC modes in a router. (8)

OR

VIII. a. List and explain the types of memory in routers. (9)

    b. Explain Disaster Recovery. (6)

UNIT - IV

IX. a. Explain developing Troubleshooting Skills. (6)

    b. Differentiate TCP/IP Interior and Exterior Gateway Protocols. (9)

OR

X. a. Describe Network Analysis and Performance Tuning. (7)

    b. Define Autonomous Systems. List and state its types. (8)

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