USN

Seventh Semester B.E. Degree Examination, June/July 2023
Network Management

Time: 3 hrs.   Max. Marks: 100

Note: *Answer any FIVE full questions, choosing ONE full question from each module.*

Module-1

1   a. With a neat sketch, explain the Analogy of Telephone Network Management. **(10 Marks)**
    b. Explain the Client – Server Network Model in Distributed Computing Environment.
                                                                                          (10 Marks)

OR

2   a. With a neat diagram, explain Internet Fabric Model. **(06 Marks)**
    b. Explain the protocol OSI layers and what are the services offered by each layer. **(04 Marks)**
    c. Explain the Network Management functional groupings with a neat diagram and draw the flow chart. **(10 Marks)**

Module-2

3   a. Explain the Network Management Standards and specify the Protocols for each standard.
                                                                                          (08 Marks)
    b. With a neat diagram, explain 2 – tier and 3 – tier Organization model. **(06 Marks)**
    c. Explain the Managed Object Perspectives for Internal and OSI with neat diagrams.
                                                                                          (06 Marks)

OR

4   a. Explain Communication Model, with a neat diagram. **(04 Marks)**
    b. Explain with neat diagram ASN.1 Data type structure and Tag. **(08 Marks)**
    c. Explain TLV Encoding structure and MACROS. **(08 Marks)**

Module-3

5   a. With a neat diagram, explain Internet documents. **(10 Marks)**
    b. Explain the System Overview of SNMP Network Management Architecture. **(10 Marks)**

OR

6   a. Explain RMON1 Textual Conventions and RMON1 Groups and functions with diagram.
                                                                                          (08 Marks)
    b. Explain the relationship between Control and Data tables with diagram. **(04 Marks)**
    c. Explain ATM Remote Monitoring. **(08 Marks)**

Module-4

7   a. With a neat diagram, explain the HFC Network. **(08 Marks)**
    b. Write a note on Broadband LAN Architecture. **(04 Marks)**
    c. With a neat sketch, explain Data Over Cable Reference Architecture. **(08 Marks)**

OR

8   a.   With a neat diagram, explain a Simplified Asymmetric Digital Subscriber Access Network.   **(08 Marks)**

      b.   Describe the Architecture of ADSL and Role of ADSL in Overall Network.   **(08 Marks)**

      c.   Specify and explain the ADSL Channeling Schemes.   **(04 Marks)**

Module-5

9   a.   Write a note on Fault Management.   **(06 Marks)**

      b.   With a neat diagram, explain Rule Based Reasoning.   **(06 Marks)**

      c.   With a neat diagram, explain CRITTER Architecture.   **(08 Marks)**

OR

10   a.   With a neat diagram, explain Authentication Server.   **(04 Marks)**

      b.   Write a note on Ticket Granting System.   **(05 Marks)**

      c.   Explain Security Breaches and Resources needed to prevent them and explain Secret key and Public key Cryptography Techniques.   **(11 Marks)**

* * * * *