U.S.N

P.E.S. College of Engineering, Mandya - 571 401
(An Autonomous Institution affiliated to VTU, Belgaum)
First Semester - M. Tech., Computer Science and Engineering
Semester End Examination; Jan - 2017
Network Management

Time: 3 hrs   *Max. Marks: 100*

*Note: Answer **FIVE** full questions, selecting **ONE** full question from each unit.*

UNIT - I

1 a.	What is the goal of Network Management? Explain the functions of Network Management with a neat diagram.	8
b.	Discuss the challenges of IT managers.	8
c.	Explain TLV encoding structure.	4
2 a.	With a neat diagram of OSI Network Management Model explain the functions of Organizational Model.	10
b.	Explain the use of MACROS in ASN.1.	4
c.	Explain ASN.1 with its conventions.	6

UNIT - II

3 a.	List the different types of SNMP operations. Explain Get Request and Get next Request in detail with neat diagrams.	10
b.	Illustrate with an example How an NMS monitors a LAN Network.	10
4 a.	Explain the structure of Management Information Base.	6
b.	Explain SNMP data type format?	6
c.	Discuss SNMP protocol specifications for the communication between manager and the agent.	8

UNIT - III

5 a.	Discuss the major changes of SNMP2.	8
b.	Explain SNMPV2 MIB with a neat diagram.	8
c.	Explain the methods used for SNMPV1 to SNMPV2 migration.	4
6 a.	What is Remote monitoring? Explain how network can be configured using RMON? With neat diagrams.	8
b.	Explain ATM Remote monitoring.	8
c.	Explain RMON 2 conformance specifications with a diagram.	4

UNIT - IV

7 a.	Explain TMN functional Architecture with a neat diagram.	8
b.	What is event correlation? List different correlation techniques and explain Rule Based and Model Based Reasoning approaches.	12

8 a. Explain the different ways of Preventing Security Breaches. 10

  b. Explain the different mechanisms of client server Authentication systems with a neat sketch. 10

UNIT - V

9 a. Discuss Broad Band Access Technology. 6

  b. Explain Data over cable System reference Architecture with a neat diagram. 8

  c. List the different components of Cable Network Management. Explain. 6

10 a. Explain ADSL System Reference Model with a neat diagram. 8

  b. Explain the functional components of XML-based manager application along with management transactions in XML with neat diagrams. 12

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