



--	--	--	--	--	--	--	--	--	--

## P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belgaum)

First Semester, M. Tech - Computer Engineering (MCEN)

Semester End Examination; Jan/Feb. - 2016

### Network Management

Time: 3 hrs

Max. Marks: 100

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

#### UNIT - I

- 1 a. Discuss the challenges of information technology managers. 13
- b. Explain Network management dumbbell architecture with a neat diagram. 7
- 2 a. Explain models listed below with necessary diagrams; 12
  - i) Network Management model
  - ii) Organization model
  - iii) Information model.
- b. Describe how on NMS monitor a sub network using a commercial network management system with a diagram. 8

#### UNIT - II

- 3 a. Explain clearly the functions of two tier and three tier SNMP organization model. 8
- b. Explain with block diagram SNMP ASN.1 Data type. 8
- c. Write SNMP access policy. 4
- 4 a. Explain with a neat diagram the SNMP Network management architecture. 10
- b. Describe SNMP protocol specifications and Get Request PDU operation. 10

#### UNIT - III

- 5 a. Discuss major improvements to the architecture in SNMPV2. 10
- b. What is Remote Monitoring? Explain RMON SMI and MIB. 10
- 6 a. Explain SNMPV2 structure of management information with neat diagram. 10
- b. Relate RMON1 and RMON2 and explain the improvements in RMON2. 10

#### UNIT - IV

- 7 a. Describe with a neat diagram TMN conceptual model. 10
- b. Explain how performance statistics play an essential part in network management. Explain performance management in details. 10
- 8 a. Explain three architectural perspective of TMN. 14
- b. Write a note Fault management. 6

#### UNIT - V

- 9 a. Explain with diagram broadband access networks technologies. 10
- b. Describe ADSL technology. 10
- 10 a. Write a note on cable modem. 10
- b. Discuss about ADSL Management. 10