

M.Sc. (INFORMATICS)/ IV Sem – 2019  
Paper IT 42 – Tele-Communication & Network Management

TIME: 03 hours

Max Marks: 75

(Write your Roll No. on the top immediately on receipt of this question paper)

**Attempt five questions in all**

Question No. 1 is compulsory

**Q1.** Define the following Network Management Functional requirements (3x5=15)

- I. Fault Management
- II. Configuration Management
- III. Accounting Management
- IV. Performance Management
- V. Security Management

**Q2.** Draw and explain the architecture for deployment of distributed network Management System. Why Proxy Agents are used in Network Management. (15)

S-N-P

A-A  
S-T

**Q3.** What Is SNMP? What is the importance of Management Information Base? (15)

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**Q4.** Define SNMP Operations **get, set & trap** with Protocol Data Unit (PDU). What is the importance of community string in SNMPv1 & SNMPv2? (15)

**Q5.** Define the working of following: (3x5=15)

- I. MRTG
- II. RRDtool
- III. RMON
- IV. SNMPv3
- V. SNMPWALK

**Q6.** Considered the newly deployed campus network give the characteristics of the topology and write down the elements needs to be monitored give details of the parameters along with properties of the elements you wish to monitor. (15)