

**R18**

**Code No: 157HJ**

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**B. Tech IV Year I Semester Examinations, December-2023/January-2024**

**NETWORK MANAGEMENT SYSTEMS AND OPERATIONS**

**(Computer Science and Engineering (Cyber Security))**

**Time: 3 Hours**

**Max. Marks: 75**

**Note:** i) Question paper consists of Part A, Part B.

ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.

iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

**PART - A**

**(25 Marks)**

- 1.a) Define Network Management and Distributed System. [2]
- b) Write the purpose of the DNS Server. [3]
- c) What is the scope of Network Management? [2]
- d) Discuss the dependencies among configuration parameters. [3]
- e) Compare the passive observation Vs. active probing. [2]
- f) Explain the Human Failure and Network Faults. [3]
- g) Enumerate on the management of wireless networks. [2]
- h) Explain the evolution of Management tools. [3]
- i) What is Nagios network monitoring tool? [2]
- j) Which tool is effective for network monitoring and why? [3]

**PART - B**

**(50 Marks)**

- 2.a) Illustrate the Network Management in the Gartner Model.
  - b) Describe the VLAN Switch. [5+5]
- OR**
- 3.a) Explain the effect of physical organization on Management.
  - b) Give a note on HTTP Load Balancer. [5+5]
- 4.a) Give the classification of devices.
  - b) What is the Intuition for configuration? Explain in brief the configuration and protocol layering. [3+7]
- OR**
- 5.a) Explain the Organization of management Software.
  - b) Give a note on automated rollback and timeout. [5+5]
- 6.a) Describe the variance in traffic and congestion.
  - b) Enumerate on the planning the capacity of a router and a switch. [5+5]
- OR**
- 7.a) Discuss the route changes and traffic engineering.
  - b) How to identify the Cause of a Fault? [7+3]

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- 8.a) Explain the management goals related to security.
- b) Describe the Remote Aggregation Of Management Traffic. [5+5]

**OR**

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- 9.a) Give a note on packet analysis tools.
- b) Describe the audit trails and security logging. [5+5]

- 10. Explain the features of any two Network management Tools. [10]

**OR**

- 11. Give a note on Google Cloud network. [10]

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QA QA QA QA QA QA QA G

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