

**UNIVERSITY COLLEGE TATI (UC TATI)****FINAL EXAMINATION QUESTION BOOKLET**

COURSE CODE	: DNT 1024
COURSE	: SCALING NETWORK
SEMESTER/SESSION	: 2 – 2022/2023
DURATION	: 3 HOURS

**Instructions:**

1. This booklet contains 5 questions. Answer **ALL** questions.
2. All answers should be written in answer booklet.
3. Write legibly and draw sketches wherever required.
4. If in doubt, raise your hands and ask the invigilator.

**DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO****THIS BOOKLET CONTAINS 3 PRINTED PAGES INCLUDING COVER PAGE**

SCALING NETWORK (DNT 1024)

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**QUESTION 1**

- a) State **FOUR (4)** needs of scaling networks. (4 marks)
- b) List **TWO (2)** ways to expanding the network. (2 marks)
- c) Explain **TWO (2)** functions of multilayer switch. (4 marks)
- d) Differentiate between in-band and out-band management. (4 marks)
- e) Explain **THREE (3)** layers in hierarchical network. (6 marks)
- f) State **FIVE (5)** examples of network devices. (5 marks)

**QUESTION 2**

- a) Explain the benefits of multiple cabled paths between switches. (6 marks)
- b) Describe the issues with redundancy. (3 marks)
- c) State **FOUR (4)** types of spanning tree protocols. (4 marks)
- d) Discuss **FOUR (4)** benefits of spanning tree protocol. (8 marks)
- e) List **FOUR (4)** types of port roles. (4 marks)

**QUESTION 3**

- a) State **FOUR (4)** benefits of wireless connection. (4 marks)
- b) Explain **TWO (2)** types of wireless technology. (4 marks)
- c) Give **TWO (2)** examples of wireless network devices. (2 marks)
- d) Identify **THREE (3)** types of wireless antenna. (3 marks)

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**QUESTION 4**

- a) Compare **FIVE (5)** features or characteristics of EIGRP for IPv4 and IPv6. (10 marks)
- b) State **FIVE (5)** basic features of EIGRP. (5 marks)
- c) Write down the suitable command for functions below:
- i. Enables the EIGRP process (2 marks)
  - ii. To completely remove the EIGRP routing process (2 marks)
  - iii. Enable any IPv6 routing protocol (2 marks)
  - iv. To examine the IPv6 routing table (2 marks)
  - v. Enabling EIGRP of IPv6 on an Interface g0/0 (2 marks)

**QUESTION 5**

- a) Differentiate between single-area OSPF and multi-area OSPF. (6 marks)
- b) Give **THREE (3)** types of OSPF router. (3 marks)
- c) List any **THREE (3)** commands to verify the OSPF configuration. (3 marks)

-----END OF QUESTIONS-----