UNIVERSITY COLLEGE
TATI

UNIVERSITY COLLEGE TATI (UC TATI)

FINAL EXAMINATION QUESTION BOOKLET

COURSE CODE	: BNS 2033
COURSE	: CONNECTING NETWORK
SEMESTER/SESSION	: 2 – 2024/2025
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

CONNECTING NETWORK (BNS 2033)

QUESTION 1

a) Compare small, medium and large networks. (6 marks)

b) Differentiate **THREE (3)** types of network hierarchy. (6 marks)

c) State **ONE (1)** top trend in IT environment. (1 mark)

QUESTION 2

a) List **FIVE (5)** examples of devices involved in WAN environment. (5 marks)

b) Compare packet switching with circuit switching. (4 marks)

c) Explain the advantages and disadvantages of dial-up technology. (4 marks)

QUESTION 3

a) Differentiate **THREE (3)** functions of serial and parallel ports in PPP. (6 marks)

b) Write down the basic command to configure HDLC. (2 marks)

c) Explain **THREE (3)** main components of PPP. (6 marks)

d) Describe **TWO (2)** PPP configuration options. (4 marks)

e) Explain time division multiplexing concept in serial communications with appropriate diagram. (6 marks)

QUESTION 4

a) Explain the benefits of frame relay in cost effectiveness and flexibility. (4 marks)

b) State **TWO (2)** types of frame relay topologies. (4 marks)

c) Write down the command to configure the frame relay and verify the mapping. (5 marks)

d) Explain the IPv4 weaknesses and why NAT is necessary. (6 marks)

e) Compare **THREE (3)** classes of IPv4 private address. (6 marks)

CONNECTING NETWORK (BNS 2033)

QUESTION 5

a) Compare network address translation (NAT) with port address translation (PAT).   (6 marks)

b) State **FOUR (4)** limitations of NAT.   (4 marks)

c) List **TWO (2)** types of NAT.   (2 marks)

d) Sketch a diagram of wireless LAN topology.   (4 marks)

e) State **FIVE (5)** examples of wireless devices.   (5 marks)

f) Explain **TWO (2)** protocols to secure wireless LAN.   (4 marks)

--END OF QUESTIONS---