



NATIONAL OPEN UNIVERSITY OF NIGERIA

University Village, Plot 91, Cadastral Zone,

Nnamdi Azikiwe Expressway, Jabi, Abuja

FACULTY OF SCIENCES

NOVEMBER, 2018 EXAMINATION

Course Code: CIT311
Course Title: Computer Networks
Credit Unit: 3
Time Allowed: 2½ Hours
Instruction: Answer Question 1 and any other four 4 Questions

- 1(a) Mention the three characteristics by which the LANs are distinguished from other kinds of networks (3 marks)
- 1(b) In a tabular form, compare and contrast the OSI Reference Model and the TCP Reference Model (12 marks)
- 1(c) In appropriate order, mention the seven layers of ISO OSI Reference Model (7 marks)
- 2(a) List four main tasks that the session layer provide (4 marks)
- 2(b) In orderly way, list the four TCP/IP network layers (4 marks)
- 2(c) List two IEEE Standards for LAN configuration (4 marks)

3(a) With appropriate examples, explain the guided and unguided transmission media (4 marks)

3(b) Explain the relationship between Data Rate and Bandwidth (4 marks)

3(c) Compare and contrast the analog signal and digital signal (4 marks)

4(a) Define 'Multiplexing' in data communication (4 marks)

4(b) Explain the term 'Broadcast networks' (4 marks)

4(c) Define the following terms:

(I) Routers (2 marks)

(II) File Transfer Protocol (2 marks)

5(a) List and explain the three services provided by data link layer (6 marks)

5(b) List four examples of routing protocols (4 marks)

5(c) List the two commonest problems that can occur with RIP (2 marks)

6(a) Repeaters are often used to increase the maximum interconnection length, list the four main functions of the repeaters (4 marks)

6(b) List four domain names and their meanings (4 marks)

6(c) Define the 'World Wide Web' (4 marks)