

NATIONAL OPEN UNIVERSITY OF NIGERIA

SCHOOL OF SCIENCE & TECHNOLOGY

CIT 754 NETWORK PROGRAMMING AND DESIGN Time Allowed: 2½ hrs

Course Credit Unit: 3 Total

Mark: 70

Instruction: Answer three (3) questions

- 1. (a) State any five advantage offered by networking of computers over a single system (5 marks)
 - (b) State two disadvantages of networking (3 marks)
 - (c) List the various types of computer networks (6marks)
- 2. (a) In a tabular form outline the different classes of Network and their respective IP address (6 marks)
 - (b) List any four of the common naming abbreviations and their meaning for domain connection (6 marks)
 - (c) State any two benefits of subnets (2marks)
- 3. (a) Enumerate the guidelines for switch port allocation (6 marks)
 - (b) Identify the actions performed by the listen function that is called only by a TCP server (6 marks)
 - (c) Define the term "Twisted Pair Cable" (2 marks)
- 4 (a) Draw a flowchart of generic carrier sense protocol (8marks)
 - (b) Explain the concept of signal collision (6 marks)
- (c) List any two commonly used media for digital signals (2 marks)
 - 5 (a) With the aid of an illustrative diagram show how Socket address structure passed from process to kernel. (5 marks)

- (b) With the aid of an illustrative diagram show how Socket address structure passed from kernel to process (5marks)
- (c)State any four of the considerations for planning a cabling system (4 marks)
- 6) We set disposition of a signal by calling the sigaction function, describe the three choices for the disposition (14 marks)
- 7(a) Discuss the 64-bit Architectures (9marks)
 - (b) Enumerate five of the functions of Network Operating System (5marks)