NATIONAL OPEN UNIVERSITY OF NIGERIA
SCHOOL OF SCIENCE & TECHNOLOGY

Course Code: CIT 854 ***Time:*** 3 hrs

Course Title: NETWORK PROGRAMMING AND DESIGN

Course Credit Unit: 3 **Total Mark**: 70

Instruction: Answer three (3) questions

1. (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)

2. (a) State any five advantage offered by networking of computers over a single system (6 marks)
   (b) State two disadvantages of networking (2 marks)
   (c) List the various types of computer networks (6marks)

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 (a) Describe three choices for the disposition of a signal (14 Marks)

7 (a) Discuss the 64-bit Architectures (9marks)
(b) Enumerate five of the functions of Network Operating System (5marks)