

NATIONAL OPEN UNIVERSITY OF NIGERIA University Village, Plot 91, Cadastral Zone, Nnamdi Azikiwe Express Way, Jabi, Abuja

FACULTY OF SCIENCES

JULY 2017 EXAMINATION

Course Code: CIT 854 Time: $2^{1}/_{2}$ hrs

Course Title: Network Programming and Design

Course Credit Unit: 3

Instruction: Answer Question One (1) and other any four (4) questions.

- 1. (a.) Write short notes on the OSI reference model listing its layers in the correct sequence and stating the function(s) of each layer (14 marks)
 - (b.) Give the guidelines for switch port allocation (6 marks)
 - (c.) List any two commonly used media for digital signals (2 marks)
- 2. (a) State any eight of the considerations for planning a cabling system (4 marks)
 - (b) Enumerate any four of the criteria for network addressing (8 marks)
- 3. (a) Briefly discuss the benefits of subnets (6 marks)
 - (b) Discuss the 64-bit Architectures (6 marks)
- 4. (a) State any five advantage offered by networking of computers over a single system (5marks)
 - (b) What is the disadvantage of networking? (1 mark)
 - (c) In a tabular form outline the different classes of Network and their respective IP address (6 marks)
- 5. (a) Name and describe any four problems of Network Devices.) 8 marks
 - (b) Briefly explain the term "Network Topology".) 4 marks
- 6. (a.) List any four of the common naming abbreviations and state their meaning for domain connection (8 marks)
 - (b) Write short notes on Twisted Pair Cable (6 marks)