

NATIONAL OPEN UNIVERSITY OF NIGERIA 14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS SEPTEMBER/OCTOBER 2015 EXAMINATION

SCHOOL OF SCIENCE AND TECHNOLOGY

COURSE CODE: CIT 723

COURSE TITLE: OPERATING SYSTEM DESIGN AND PROGRAMMING

Instruction: Answer any five questions each question carries 14 marks

Time: 2½ hours

1. (a) What is the Purpose of a network? (2½ marks)

- (b) Outline the steps involved in successfully delivering information between devices on a network. (7½ marks)
- (c) State any four benefits of networking. (4 marks)
- 2. Write short notes on the following describing and stating advantages and disadvantages of each:
 - (a) Peer-to-Peer Network (7 marks)
 - (b) Server-Based Network (7 marks)
- 3. List four qualities of operating systems and discuss any three of the listed qualities. (14 *marks*)
- 4. Write short notes on the following:
 - (a) Routing Information Protocol (RIP)(5 marks)
 - (b) Service Advertising Protocol (SAP) (5 marks)
 - (c) Internet Application Protocols (4 marks)
- 5. (a) State any four advantages and one disadvantage of Linux operating system. (5 marks)
 - (b) Enumerate the six basic rules, you need to remember to be ableto understand thesyntax of any Linux(9 *marks*)
- 6. (a) Describe Network Load Balancing (5 marks)
 - (b) State the models for configuring Network Load Balancing and discuss any two. (9 *marks*)
- 7. (a) What are network protocols? (2 marks)
 - (b) Write short notes on the following describing and stating their functions:
 - i) Internet Protocol (IP) (6 marks)
 - ii) Transmission control protocol (TCP). (6 marks)