

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: CIT461

Course Title: Internet Architecture and Communications

Time: 2 Hours

Instruction: Answer any Four (4) questions.

- 1a. Write short note on any security measures for E-Business Systems. [4.5 marks]
- 1b. Explain Internet Protocol. [5 marks]
- 1c. Explain classes C and D of IP Addresses. [8 marks]
- 2a. Explain Internet Control Message Protocol (ICMP). [4 marks]
- 2b. State and discuss two primary responsibilities of IP [6 marks]
- 2c. State five (5) useful messages generated by Internet Control Message Protocol (ICMP). [7.5 marks]
- 3a. State the two types of simple internet connection. [2.5 marks]
- 3b. Write short note on the two fields of IP Addresses [6 marks]
- 3c. Write short note on the following: [9 marks]
 - i. Bridges
 - ii. Brouters
 - iii. Gateway
- 4a. Explain class E of IP Address. [4 marks]
- 4b. Write short note on IP address. [4.5 marks]
- 4c. List and explain the two popular approaches to packet switching. [9 marks]
- 5a. State two advantages of Message switching and one disadvantage of Cell switching of Packet Switched Systems [4.5 marks]
- 5b. List and explain the two types of Ethernet Hubs. [6 marks]
- 5c. Describe classes A and B of IP Addresses. [7 marks]
- 6a. State three main equipment required for internet access. [2.5 marks]
- 6b. Explain Multicasting. [6 marks]
- 6c. Write short note on the four levels of ISPs. [9 marks]