

**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**University Village, 91 Cadastral Zone, Nnamdi Azikwe Expressway, Jabi, Abuja**

**FACULTY OF SCIENCE**

**NOVEMBER, 2018 EXAMINATIONS**

**COURSE CODE: CIT465**

**COURSE TITLE: Network Administration**

**CREDIT: 2 Units**

**TIME ALLOWED: 2 Hours**

**INSTRUCTION: Answer Question ONE (1) and any other THREE (3) Questions**

1a) List the two areas where security breach can occur ***(2 marks)***

b) State the first principle of server security ***(2½ marks)***

c) What is a Firewall? ***(2 marks)***

d) What is *Network forensics*? ***(2 marks)***

e) List the schemes performing system dumps.***(2 marks)***

f) Enumerate the key elements of Protocols ***(4 ½ marks)***

g) Enumerate the two principal functions of protocols in a network ***(4 marks)***

h) State any other **three** functions (different from the principal functions) of protocols in a network. ***(3 marks)***

i) State the various ways by which standards can come into being. ***(3 marks)***

2a) State and briefly explain the principle of the “Weakest link” as the fundamental principle of any performance analysis. Use relevant corollary for your illustration. ***(9 marks)***

b) State and briefly describe the basics of backup. ***(6 marks)***

3a) List and briefly describe the resources being protected by a network security system? ***(8 marks)***

b) Protecting ourselves against threat involves a limited number of themes. State any **five** of these themes. ***(5 marks)***

c) How often we need to make backups depends on two competing rates of change. State them. ***(2 marks)***

4a) State and write short notes on the components of the basic structure of a packet. ***(9 marks)***

b) In system backup, the level of redundancy which is appropriate for a given site is a question of economics based on four factors. State these factors. ***(4 marks)***

c) Define Policy. ***(2 marks)***

*5*a) Different vendors have invested in different networking technologies, with different Media Access Control (MAC) specifications that involve several interfaces and cables. List the technologies that have been successfully adopted by major vendors. ***(3 marks)***

b) Write short notes on any three of the technologies listed in (a) above ***(12 marks)***