



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2017/2018

SECOND YEAR FIRST SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

MAIN CAMPUS

CIM 207: SYSTEM SUPPORT

Date: 21st February, 2018

Time: 12.00 - 3.00 pm

INSTRUCTIONS:

- Answer ALL questions in SECTION A and any other TWO from SECTION B
- Write your registration number on all sheets of the answer book used.
- Use a NEW PAGE FOR EVERY QUESTION attempted, and indicate number on the space provided on the page of the answer sheet.



SECTION A: COMPULSORY

Question One (30 Marks)

- a) Briefly define the following terms as used in system administration (10 marks)
- (a) Protocols
 - (b) Client server model
 - (c) Domain name
 - (d) Operating systems
 - (e) Default gateway
- b) Hassan has an extra 128 MB of RAM a DIMM. Her friend has a computer and needs more memory. What does he need to consider in order determining if this memory module on her computer can be used on her computer (4 marks)
- c) Differentiate between the following pairs
- (i) Simplex and Full Duplex Transmission (4 marks)
 - (ii) Parallel mode and Serial modes of transmission (4 marks)
- d) Explain two ways of Installing and Sharing a Printer (4 marks)
- e) With the aid of examples distinguish between resident virus and a transient virus (2marks)

SECTION B

Question 2(20 Marks)

- a) A system administrator faces a lot of challenges while carrying out his daily duties, briefly discuss at least five challenges that a system administrator encounters. (10 marks)
- b) A user connects to a shared folder across the network. The user has been granted change shared folder permissions and read NTFS permission. State the actions that the user can perform on the file stored on the folder. (6 marks)
- c) Differentiate between bounded and unbounded transmission media. Describe two examples of each. (4 marks)

Question 3 (20 Marks)

- a) Give a brief explanation of how antivirus software manages to curb viruses in systems (2 marks)
- b) There are five main virus detection methods or techniques. Explain any four methods (8 marks)
- c) Discuss four functions of the network and system administrator (4 marks)
- d) Discuss why TCP/IP is so popular (6 marks)

Question 4 (20 Marks)

- a) Explain how disk defragmenter utility optimizes the performance of a computer system (4 marks)
- b) Explain how you would adjust your troubleshooting strategy if you discovered that some work stations in the building, could ping the e-mail server and some could not (4 marks)

- c) RAM can be divided into TWO types. Briefly describe these types (4 marks)
- d) Outline the steps you would go through in troubleshooting a network with a particular physical topology (10 marks)

Question 5 (20 Marks)

- a) (i) State THREE types of classification of Communication Hardware (3 marks)
(ii) Explain each of the type stated in (i) above citing examples (3marks)
- b) Write short notes to explain the concept of virtual memory (4 marks)
- c) Differentiate between primary and secondary storage as applied in computer systems giving One example in each case (6 marks)
- d) Differentiate between application software and firmware giving an example of each (4 marks)