

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF BUILT ENVIRONMENT

BACHELOR OF QUANTITY SURVEYING (HONOURS) DEGREE

PART I FIRST SEMESTER EXAMINATIONS APRIL 2009

INTRODUCTION TO INFORMATION TECHNOLOGY: AQS1109

TIME: 3 HOURS TOTAL MARKS: 100

Answer any Four Questions

Question One

- a) Explain why the central processing unit is considered as the heart of a computer system. (10 marks)
- b) Outline the different ways in which a computer virus can affect a computer system. (10 marks)
- c) Would you consider the use of a spelling checker, and perhaps a grammar checker, on your final documents a sufficient substitute for proof reading? (5 marks)

Question Two

- a) What tools can be used to search for information on the internet? (5 marks)
- b) Discuss the technology used in compact disks and digital versatile disks to store data. (10 marks)
- c) Opting for the latest technology is not always the best way to ensure that your business organization survives competition. Discuss. (10 marks)

Question Three

- a) Discuss any four advantages of a database environment in an organization. (12 marks)
- b) Write a Spreadsheet (Microsoft Excel) formula to do the following data manipulations.
- i) Find the average of a set of marks for a given set of students. (2 marks)
 - ii) Grade a given mark as “Fail, Pass, 2.2, 2.1, or 1. (5 marks)
- c) ‘The bigger the computer does not mean the faster the speed or the greater the storage capacity.’ Discuss. (6 marks)

Question Four

a) If it wasn't of the INTERNET the mainframe would have long been forgotten. Discuss. (10 marks)

b) When an organization needs to accomplish a new task or change a work process, it develops a new system or modifies an existing one. Successful systems development means delivering a system that meets user requirements and organizational needs – on time and within budget. Give factors, which affect systems development success. (10 marks)

c) Distinguish between system software and development software. (5 marks)

Question Five

a) You wish to set up an information system to handle all your data processing needs in your Quantity Surveying Company. Having done a course in Information Technology you know what technologies exist to handle your needs. Discuss the hardware and software components that you would need to set up the information system so as to produce efficient bills of quantities on time and to gain a competitive advantage over your competitors. In your discussion point out security, data integrity and economic factors that each of these components will address. (20 marks)

b) Describe the functional units of a central processing unit. (5 marks)

Question Six

a) How many bytes make a terabyte? (1 mark)

b) Explain the appropriate application for each of the following optical disk devices:

i) CD –R/W (2 marks)

ii) DVD R/W (2 marks)

c) Using appropriate examples, distinguish between End User Computing and Computer Science. (20 marks)