

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF ARCHITECTURE AND QUANTITY SURVEYING
BACHELOR OF QUANTITY SURVEYING (HONOURS) DEGREE
PART I FIRST SEMESTER SUPPLEMENTARY EXAMINATIONS– JULY 2006

INTRODUCTION TO INFORMATION TECHNOLOGY – AQS 1109

TIME: 3HRS

INSTRUCTIONS:

This question paper consists of **SIX (6)** questions.

Answer **ANY FIVE** Questions. All questions carry equal marks.

QUESTION 1

a) Explain the following terms

- i. IT
- ii. Software
- iii. Operating system
- iv. Secondary memory

[8 marks]

b) Describe the different components that make up the Central Processing Unit of a computer (CPU) [6 marks]

c) Give a brief description of some of the aspects that you would recommend for consideration when choosing a secondary storage device. [6 marks]

QUESTION 2

a) How is printing produced in the following types of printers?

- i. Laser
- ii. Dot matrix

[8 marks]

b) Computers can be classified/ categorised as being one of the following:

microcomputers, minicomputers, mainframe computers, super computers, etc.

Explain any three characteristics/ points that can be used in the classification? Briefly describe the following types of computers

- i. Super Computer
- ii. Mainframe computer

[8 marks]

c) Describe four factors you would consider in buying an application software package.

[4 marks]

QUESTION 3

- a) Discuss the following types of computer network topologies, pointing out their advantages and disadvantages.
- i. Bus
 - ii. Star
- [8 marks]
- b) i) Represent FF49 as a decimal number [2 marks]
ii) Represent 9731 using the BCD number representation [2 marks]
iii) Represent the number 557 in Hexadecimal notation [4 marks]
- c) State any four benefits of the Internet to institutions like NUST. [4 marks]

QUESTION 4

- a) Using your own examples explain the following information processing concepts
- i. Multitasking
 - ii. Multiprogramming
 - iii. Multiprocessing
 - iv. Multi-user system
- [8 marks]
- b) Describe the typical facilities provided by a spreadsheet package such as Microsoft Excel. [10 marks]
- c) Describe the main functions carried out by an operating system. [6 marks]

QUESTION 5

- a) Describe the following:
- i. High-level language
 - ii. Low-level language
 - iii. Computer Virus
- [12 marks]
- b) Discuss the differences between Fixed-point and Floating-point number representation. [8 marks]

QUESTION 6

- a) Distinguish between ROM and RAM. Is it necessary to include both in a general-purpose computer system? [10 marks]
- b) Briefly describe the role of a Webmaster in an organization. [5 marks]
- c) Applications software can be classified as word processors, spreadsheets, presentation software, etc, etc. With the aid of appropriate examples briefly describe how presentation software works. [5 marks]

END OF EXAMINATION

