



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2015/2016

**FIRST YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE OF
BACHELOR OF BACHELOR OF SCIENCE, BACHELOR OF EDUCATION
AND BACHELOR OF ARTS WITH INFORMATION TECHNOLOGY**

CITY CAMPUS-(DAY/EVENING/WEEKEND)

UCI 101: FOUNDATIONS OF INFORMATION TECHNOLOGY

Date: 5th December, 2015

Time: 9.00 - 11.00 am

INSTRUCTIONS:

- SECTION A: Attempt question ONE which is compulsory (30 marks)
- SECTION B: Attempt any TWO questions (20 marks each)

SECTION A : COMPULSORY QUESTION (30 MARKS)

QUESTION 1

- (a) Define the following terms as used in Information Technology:
- (i) Data (2marks)
 - (ii) Bucketing (2marks)
 - (iii) Batch Processing (2marks)
- (b) With examples, explain how hybrid computers work (6marks)
- (c) Briefly describe a plotter. (3 marks)
- (d) State the full meaning of the term GIGO and using examples explain its implication in the Information Technology environment. (6marks)
- (e) State the contribution of the following personalities in the development of the Modern computer.
- (a) John Von Neumann (3 marks)
 - (b) Blaise Pascal (3 marks)
- (f) State and explain any THREE short comings of Low level languages. (3 marks)

SECTION B : ATTEMPT ANY TWO QUESTIONS (20 MARKS EACH)

QUESTION 2

- (a) Briefly discuss how human limitations have been overcome by computers as information processors (8marks)
- (b) Identify the THREE types of translators and explain how each of them works. (6marks)
- (c) Briefly explain the function of each of the following in a modern computer.
- (i) Control Unit
 - (ii) DVD-ROM
 - (iii) Data bus (6 marks)

QUESTION 3

- (a) One of the functions of an operating system is to manage processes. Discuss this with special reference to
- (i) Multiprocessing, (3marks)
 - (ii) C.P.U time slice. (3marks)
 - (iii) Non-emptive processing (4marks)
- (b) Explain while giving examples, how computers are classified according to the purpose for which they are built. (10 marks)

QUESTION 4

- (a) State and explain any FIVE ways employers would misuse computers at their work places. (10marks)
- (b) What is a User Interface? State and explain the characteristics the THREE common User Interfaces in computer Operating systems. (10 marks)

QUESTION 5

- (a) Discuss the characteristics of the following languages:
- (i) 4GLs,
 - (ii) Assembly languages, (8marks)
- (b) Discuss the removable storage devices of a computer system. (6marks)
- (c) Your local school's principal wants to buy an Integrated Package for the school. Explain to him how the school is bound to benefit from the package. (6marks)