

EGERTON



UNIVERSITY

UNIVERSITY EXAMINATIONS
SCHOOL BASED PROGRAMME

SECOND SEMESTER 2012/2013

FIRST/SECOND YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF
EDUCATION

COMP 101 – INTRODUCTION TO COMPUTER APPLICATIONS

STREAM:

TIME: 2 HOURS

DAY: SATURDAY, 3.00 – 5.00 P.M

DATE: 04/05/2013

INSTRUCTIONS

Answer question ONE and any TWO other Questions.

Begin each Question on a new page.

Question One (30 marks)

- a) Distinguish between digital and analog computers on the basis of:
 - i) Data storage capacity, (2 marks)
 - ii) Cost of hardware (2 marks)
 - iii) Processing speed (2 marks)
- b) Distinguish between a microcomputer and a workstation. (2 marks)
- c) Write the following abbreviations in full, then explain their meaning:
 - i) ENIAC
 - ii) GUI
 - iii) ROM (6 marks)
- d) Identify any two devices which make each of the following, and explain how each of the devices is used:
 - i) Computer Input (4 marks)
 - ii) Computer Storage (4 marks)

- e) Give one example of the following:
- i) Word processor
 - ii) Database Software
 - iii) Project Management Software. (3 marks)
- f) What is meant by the following?
- i) Extranet
 - ii) Routers
 - iii) Ethernet
 - iv) HTML
 - v) VPN (5 marks)

Question Two (20 marks)

- a) Compare the second and fourth generation computers using the following technologies:
- i) Input
 - ii) Output
 - iii) Processor circuitry
 - iv) Storage (8 marks)
- b) Write the following abbreviations in full, then explain their meaning:
- i) BIPS
 - ii) RAM
 - iii) CPU (6 marks)
- c) Carry out the following conversions:
- DAB.C₁₆ to i) octal
 - ii) decimal (6 marks)

Question Three (20 marks)

- a) Give any two examples of each of the following:
- i) Macros
 - ii) Special Purpose Keys
 - iii) Function keys (6 marks)
- b) i) State any four functions of an Operating System (4 marks)
- ii) State and explain any four types of Operating Systems. (8 marks)
- iii) Give any two reasons why new Operating Systems are always being developed (2 marks)

Question Four (20 marks)

- a) Explain the meaning of the following terms as applied to Computer Networks:
 - i) Packet (2 marks)
 - ii) Bridges (2 marks)
 - iii) NetBEUI (2 marks)
- b) Describe the working of the following network topologies:
 - i) Star (5 marks)
 - ii) Bus (4 marks)
- c) i) State any two types of Local Area Networks (2 marks)
- iii) Explain how 'direction of transmission' affects communication among devices on a computer network. (3 marks)

Question Five (20 marks)

- a) Explain the meaning of the following terms:
 - i) Web browser
 - ii) Search Engine
 - iii) WWW. (3 marks)
- b) Explain any two types of Internet Connectivity. (2 marks)
- c) State and explain any four uses of the Internet. (6 marks)
- d) i) What is meant by:
 - 1) Virus (1 mark)
 - 2) Worm (1 mark)
 - 3) Hacker, as applied to Internet. (1 mark)
- ii) Explain how you can keep your computer safe against each of the above. (6 marks)
