



MAASAI MARA UNIVERSITY

**UNIVERSITY EXAMINATIONS 2019/2020 SECOND YEAR
FIRST SEMESTER EXAMINATION**

(REGULAR)

SCHOOL OF SCIENCE AND INFORMATION SCIENCES

**UNIVERSITY EXAMINATIONS FOR THE DEGREE OF
BACHELOR OF SCIENCE AGRICULTURAL ECONOMICS**

COURSE CODE: COM 1103

COURSE TITLE: INTRODUCTION TO COMPUTERS

DATE: 13th DECEMBER 2019

TIME: 2:30pm-4:30pm

INSTRUCTIONS

- Answer Question **ONE** and any other **TWO**

Question One (Compulsory Question) (30 Marks)

- a) Convert each of the following binary representation to its equivalent base ten form. **(2 marks)**
- (i) 101010
 - (ii) 1111111
- b) Convert each of the following decimal representation to its equivalent octal form. **(2 marks)**
- (i) 1
 - (ii) 1000
- c) Convert each of the following binary representation to its equivalent hexadecimal form. **(2 marks)**
- (i) 11.01
 - (ii) 110.011
- d) Express the following decimal values in binary notation. **(2 marks)**
- (i) $4\frac{1}{2}$
 - (ii) $5\frac{5}{8}$
- e) Perform the following binary additions in binary notation and convert the answer to hexadecimal. **(2 marks)**
- 1010.001 + 1.101
- f) Distinguish computers according to their size. **(10 Marks)**
- g) Describe *three* output and *two* input devices, *explaining* how they are used in computer systems. **(10 Marks)**

Question Two (20 Marks)

Individuals seeking Internet access can register, implement and maintain their own domains. However it is more common for an individual to gain Internet access via a domain established by an organization to which he or she belongs or by paying an ISP for the privilege of connecting to a domain established by the ISP.

- (i) Explain the term ISP **(2 marks)**
- (ii) Using the university web URL identify each component and describe the meaning of each. **(3 marks)**
- (iii) Discuss the factors to consider when selecting an ISP. **(5 marks)**
- (iv) Give a detailed description of different classifications of TLDs that can be used. **(5 marks)**
- (v) Explain how domain names work. **(5 marks)**

Question Three (20 Marks)

- a) You have just bought a new laptop. Discuss how you would care for it to ensure it lasts longer. **(10 marks)**
- b) Differentiate between the following computer terms giving examples **(10 marks)**
 - i. Application software and system software
 - ii. Off the shelf and bespoke software
 - iii. Volatile and non-volatile memory
 - iv. Impact and non-impact printers
 - v. Warm booting and cold booting

Question Four (20 Marks)

- a) Your friend needs assistance in purchasing a computer. He has approached you to help guide him on how to select the most appropriate computer. Discuss how you would assist him in this process. **(10 marks)**
- b) (i) Explain the term hanging in computer systems. **(2 marks)**
 - (ii) Give reasons as to why this would happen to a computer **(2 marks)**
 - (iii) Suggest ways in which you can solve this problem in Microsoft Windows based operating system environment. **(2 Marks)**
- c) Describe the development in computing during the third generations:
 - a. Third generation. **(4 marks)**

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