



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2017/2018

**SECOND YEAR FIRST SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF BUSINESS ADMINISTRATION WITH
INFORMATION TECHNOLOGY**

MAIN CAMPUS

BIT 214: INTRODUCTION TO COMPUTER PROGRAMMING

Date: 15th February, 2018

Time: 12.00 - 3.00 pm

INSTRUCTIONS:

- Answer question ONE and any other THREE questions.



QUESTION ONE. (COMPULSORY 25 MARKS)

- a). Explain the following terms as used in programming (4 marks)
- i. Object code
 - ii. Translators
- b) Explain **THREE** advantages of high level programming languages (6 marks)
- c) Maseno University savings society Pays 5% interest on shares exceeding 100,000 shillings and 3% on shares that do not meet this target. However, no interest is paid on deposits in the member's MSS bank account.

Required: Design a pseudo code for a program that would:

- i) Prompt the user for shares and deposit of particular members
 - ii) Calculate the interest and total savings
 - iii) Display the interest and total savings on the screen for particular members of the society. (7mks)
- d) Draw a flowchart for the above pseudo code. (8mks)

QUESTION TWO. (15 MARKS)

- a) Briefly explain the stages involved in programme development. Highlight main activities in each stage. (12 marks)
- b) Explain any **THREE** selection control structure. (3 marks)

QUESTION THREE. (15 MARKS)

- a) Describe **THREE** features of fourth generation languages (4GLS) (6mks)
- b) List **THREE** examples of fourth generation programming languages. (3mks)
- c) Describe **THREE** factors to be considered while choosing a programming language (6marks)

Question Four. (15 marks)

- a) Draw a flowchart showing (3mks)
- i. The nested IF selection
 - ii. The FOR loop
 - iii. REPEAT.... UNTIL loop
- b) Write HTML code that would start a web page with title 'MANAGEMENT SCIENCE'.
Headline 1 SBE, and headline 2 EXAM SECOND YEAR. Display a green background with the marquee "HELLO" appearing on the screen. (6marks)
- c) State the guidelines for designing good pseudo codes (6 marks)

QUESTION FIVE. (15 MARKS)

- a) Give two differences between the interpreters and compilers (2 marks)
- b) Write a pseudo code that would be used to classify animals according to sex. If a letter M is input the program should display "male" otherwise it should display "female" (4 marks)
- c) The gross salary of employees in LISUMU BOOK ENTERPRISE is based on basic salary and additional benefits as follows. Employees who have worked for the company for more than 10 years receive an additional pay of 10% to their basic salary. Monthly salary bonus based on

monthly sales of books is as follows: above 500,000 monthly sales bonus rate is 15%, between 250,000 and 500,000 is 10% and below 250,000 monthly sales is 5%. Draw a flowchart for a program that would be used to calculate the gross salary then output basic, gross and all benefit. (9 marks)