MURANG'A UNIVERSITY OF TECHNOLOGY

SCHOOL OF COMPUTING AND INFORMATION TECHNOLOGY

DEPARTMENT OF INFORMATION TECHNOLOGY

UNIVERSITY ORDINARY EXAMINATION

2021/2022 ACADEMIC YEAR

THIRD YEAR **FIRST** SEMESTEREXAMINATION FORBACHELOROF
DEGREE, BSc. CS, BSc. IT, BSc. CT, BSc. SE, BBIT

SIT 300– WEB APPLICATION DEVLOPEMENT

DURATION: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

1. Attempt Question ONE and Any other Two Questions
2. Mobile phones are not allowed in the examination room.
3. You are not allowed to write on this examination question paper.

QUESTION ONE (30 MARKS)

a) i) Variables are constantly used in JavaScript programming. Differentiate global and local

   scope of variables. (2 mks)

   ii) Give the output of the following JavaScript code. (2 mks)

Figure 1 attached

b) i) Define Event handlers in Java Script. (2 mks)

   ii) Describe four main uses of Event handlers in JavaScript. (4 mks)

c) Describe how a prompt dialogue box in JavaScript is of importance while a user is getting into a

   web page. (4 mks)

d) Use the following JavaScript program segment to answer the questions that follow.

Figure 2 attached

   i) What is the final value of X if the code is interpreted sequentially? (2 mks)

   ii) What is the final value of Y if the code is interpreted sequentially? (2 mks)

e) Compare *echo* and *print* as used in PHP. (4mks)

f) Using program segments, explain the difference between *for* and *foreach* loops in PHP.

   (4 mks)

g) With examples, illustrate the difference between "= =" and "= = =" operators in PHP.

QUESTION TWO (20 MARKS)

a) Write a piece of Java Script code to define and call a *function*. (5 mks)

b) Given the following JavaScript program.

Figure 3 attached

i) What value will doIT( ) return if there is not other code available to run. (5 mks)

c) Study the JavaScript program below and suggest the possible output. (4 mks)

Figure 4 attached

d) With aid of coding, differentiate between *Catch* and *Throw* statements as applied in JavaScript.

   (6 mks)

QUESTION THREE (20 MARKS)

a) Outline the main difference between PHP constraints and variables. (6 mks)

b) Describe three different types of arrays in PHP. (3 mks)

c) Outline four main differences between **GET** and **POST** methods in PHP. (4 mks)

d) Write the output of the following JavaScript *while* loop. (7 mks)

Figure 5 attached

QUESTION FOUR (20 MARKS)

a) Differentiate between Client-Side scripting and Server- side scripting. (6 mks)

b) Using program segments, explain the two different ways how one can retrieve data from the MySQL data base using PHP. (6 mks)

c) Using suitable examples, illustrate the use of *Continue* and *Break* statements in JavaScript loops.

(5 mks)

d) Explain the main error types in PHP. (3 mks)