CHUKA   **UNIVERSITY**

UNIVERSITY EXAMINATIONS

FIRST YEAR EXAMINATION FOR THE AWARD OF DIPLOMA IN COMPUTER SCIENCE

COSC 0141: INTRODUCTION TO WEB BASED PROGRAMMING

STREAMS: DIP. COMP. SCI Y1S2   **TIME: 2 HOURS**

DAY/DATE: THURSDAY 25/03/2021   **11.30 A.M. – 1.30 P.M**

INSTRUCTIONS:
- Answer question **ONE** and any other **TWO** questions in section B
- Do not write anything on the question paper
- This is a **closed book exam**, no reference materials are allowed in the examination room
- There will be **NO** use of mobile phones or any other unauthorized materials
- Write your answers legibly and use your time wisely.

SECTION A (ANSWER ALL QUESTIONS)

QUESTION ONE (30 MARKS)

a) Describe the concept of client - server computing in web-based programming   (4 Marks)

b) Describe the following terms as used in we based programming and explain how each one works.

    i. ASP   (4 Marks)

    ii. ODBC   (4 Marks)

c) List FOUR types of database management systems   (4 Marks)

d) Show how you would declare a variable in the following languages

    i. JavaScript   (2 Marks)

    ii. PhP   (2 Marks)

e) Give the difference between global and local variables   (4 Marks)

f) State any two rules to remember while naming JavaScript variables   (2 Marks)

g) Name Four JavaScript Operators   (4 Marks)

SECTION B (ANSWER ANY TWO QUESTIONS)

QUESTION TWO (20 MARKS)

a) State and Explain the **FIVE** most common internet protocols   (10 Marks)

b) Illustrate a dynamic web page with internal CSS and internal JavaScript   (10 Marks)

QUESTION THREE (20 MARKS)

a) State and Explain FIVE internet applications used in the services industry (10 Marks)

b) Giving the relevant steps, **EXPLAIN** how you would connect your dynamic web

application to a database called ebusiness.   (10 Marks)

QUESTION FOUR (20 MARKS)

a) State and Explain the most common internet security threats   (10 Marks)

b) While defining who a web administrator is, describe **FOUR** roles he / she plays in

keeping web applications safe from internet threats.   (10 Marks)

QUESTION FIVE (20 MARKS)

a) Write down the syntax of a JavaScript for loop   (5 Marks)

b) With a relevant example illustrate a JavaScript function   (5 Marks)

c) Illustrate a MySQL select statement   (5 Marks)

d) Write the main syntax of PhP with an echo statement   (5 Marks)

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