

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  
CAMPUSES: MAIN CAMPUS**

**TIME: 2 HOURS**

**DAY/DATE MAR.....**

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**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)**

- Describe the concept of client - server computing in web-based programming (4 Marks)
- Describe the following terms as used in we based programming and explain how each one works.
  - ASP (4 Marks)
  - ODBC (4 Marks)
- List FOUR types of database management systems (4 Marks)
- Show how you would declare a variable in the following languages
  - JavaScript (2 Marks)
  - PhP (2 Marks)
- Give the difference between global and local variables (4 Marks)
- 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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