

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF CERTIFICATE IN COMPUTER SCIENCE

COSC 00104: WEB PROGRAMMING AND ADMINISTRATION

STREAMS: CERT. COMP SCI Y1S2

TIME: 2 HOURS

DAY/DATE: MONDAY 08/04/2024

11.30 A.M – 1.30 P.M.

INSTRUCTIONS:

- Answer Question ONE and any other TWO Questions
- Do not write anything on the question paper
- There will be **NO** use of mobile phones or any other unauthorized materials

SECTION A (ATTEMPT ALL QUESTIONS IN THIS SECTION)

QUESTION ONE (30 MARKS)

- List **four** Data types supported by PHP. (4 marks)
- What is the difference between GET and POST form submission methods? (6 marks)
- Write a PHP script code that can be used to print a message “**hello world**” after being declared as a variable. (4 marks)
- Give **two** examples of Web Servers. (2 marks)
- Write a PHP script that uses a loop to print all even numbers between 0 and 100. (4 marks)
- What is the difference between client-side and server-side scripting? (4 marks)
- Explain **three** factors to consider when designing a User interface. (6 marks)

SECTION B (ANSWER ONLY TWO QUESTIONS)

QUESTION 2 (20 MARKS)

- What are the ways to define a constant in PHP? (2 marks)
- Write a PHP program to calculate the circumference of a circle given PI as a constant [radius is 14.0]. (8 marks)

- c. Illustrate various types of comments available in PHP. (4 marks)
- d. State and explain the rules of PHP variable declaration. (6 marks)

QUESTION 3 (20 MARKS)

- a. Describe **four** capabilities of PHP. (4 marks)
- b. As a PHP programmer, develop a form that sends your registration number and phone number to a php file called **contact. Php**. In this PHP file, capture and display the phone number received from the form. (8 marks)
- c. Demonstrate how one can make a connection to the MYSQL database. [Given that username = 'Admin', Password = '@admin123', my dB = 'user']. (8 marks)

QUESTION 4 (20 MARKS)

- a. The table below shows details of students in secondary school. Write MySQL statements to create the students' table below. (7 marks)

| Admno | First name | Last name | Class | Maths | English | Average |
|-------|------------|-----------|-------|-------|---------|---------|
| 2343 | John | Juma | 3A | 45 | 65 | 65 |
| 2344 | Mary | Akinyi | 3B | 54 | 60 | 54 |

- b. Write a query expression that will perform the following
 - i. List all students with first name starting with the letter M. (3 marks)
 - ii. List all students in class 3B. (2 marks)
 - iii. List all students who scored between 50 and 60 marks in Maths. (3 marks)
 - iv. Change the First name of John to Mathew. (3 marks)
 - v. Display all the records from the student table. (2 marks)

QUESTION 5 (20MARKS)

- a. Define the following terms as used in web administration. (10marks)
 - i. Firewall
 - ii. Attack
 - iii. Outsourcing
 - iv. Website
 - v. Social Engineering
- b. Describe **three** security threats on the World Wide Web. (6 marks)
- c. Explain the importance of validating user inputs. (4 marks)
