

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**FIRST YEAR EXAMINATION FOR THE AWARD OF CERTIFICATE IN
COMPUTER SCIENCE**

COSC 00104: WEB PROGRAMMING AND ADMINISTRATION

STREAMS: CERT. COMPSCI

TIME: 2 HOURS

DAY/DATE: FRIDAY 14/12/2018

8.30 A.M – 10.30 A.M.

INSTRUCTIONS:

- Answer question **ONE** and **TWO** other questions
- 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.
- Marks are awarded for clear and concise answers.

Question 1 (30 Marks)

b) Clearly distinguish between the following as used in internet applications. (4 marks)

- Internet and intranet.
- Web client and web server.
- HTML and XHTML.
- IP Address and domain name.

c) Create the following form controls. (4 marks)

- Two Radio button named rdoMale and rdoFemale with labels male and female.
- A text area named txta1.

d) Discuss four advantages of using css in a web application development. (4 marks)

e) JavaScript is an event driven language, explain and illustrate how the script is event driven.

(4 marks)

f) Write a program in JavaScript that utilizes function which accepts two values computes the product of the two and gives the results. (4 marks)

- g) Write a program in PHP that utilizes function which accepts two values computes the sum of the two and gives the results. (4 marks)
- h) With appropriate examples, explain three ways in which cascading style sheets can be included in an html page. (6 marks)

Question 2 (20 Marks)

- a) What is the function of the Internet Protocol (IP)? Give two limitations of the IP and explain how the Transmission Control Protocol (TCP) addresses those limitations. (4 marks)
- b) Write a JavaScript function that takes 3 parameters, price, tax rate, balance, and prints yes in an alert box if someone has adequate balance to purchase an item at the specified price with the given tax rate. Otherwise, print out no in an alert box. (8 Marks)
- c) A PHP program is required to calculate wages for employees of Kinjo Ltd. Using the following formulae.
 - a. Basic salary = No of Hours * hourly rate
 - a. Lunch Allowance = 200
 - b. Gross Salary = Basic Pay + Lunch Allowance
 - c. Income Tax charged on gross pay is 30% of the gross
 - d. Net pay = Gross pay – Tax

Hourly rate and lunch allowance are constant values. The number of hours worked are passed from a HTML form. Write a PHP function that uses the foregoing information to calculate wages for an employee. Illustrate the capabilities of the function by calculating wages for two employees, one with 20 number of hours and the other with 30 number of hours. (8 Marks)

Question 3 (20 Marks)

- a) Write html code that produces the table interface shown below. (4 marks)

Money spent on....	January	February
Clothes	\$241.10	\$150.20
Make-Up	\$30.00	
Food	\$730.40	\$650.00
Sum	\$1001.50	\$744.65
Total	\$1746.15	

- b) Write a PHP function called maxOfTwo that accepts two integer parameters and returns the larger of the two. Return 'equals' if the two integer parameters are equal. (6 marks)
- c) Give four uses of JavaScript outside web pages. (4 marks)
- d) Compare GET and POST in terms of method of sending information, usage, and limitations. Give a simple example in both cases. (6 marks)

Question 4 (20 Marks)

- a) Write html codes that produces the form interface shown below. In addition specify the form's action to be 'register-page.php' and the method to be 'post' (8 marks)

Please enter your personal details

Firstname:

Surname:

Username:

Password:

b) Write a PHP code that could be used to connect to a MySQL database named 'simpledb' given the MySQL server username and password are 'root' and 'pswd123' respectively. (4 marks)

c) Write a PHP code that will pass data from the form in a) above to a MySQL table named 'members' found in the database in b) above. (8 marks)

Question 5 (20 Marks)

a) Write html codes that creates form interface below. (10 marks)

FILL IN TO RECEIVE UPDATES

NAMES

EMAIL ADDRESS

COUNTRY ▼

GENDER **MALE**
 FEMALE

b) Write a php program that will pass data from form above to mysql database named Chuka.

marks)

(10