



**KISII UNIVERSITY**  
**UNIVERSITY EXAMINATIONS**

**SECOND YEAR EXAMINATION FOR THE AWARD OF THE**  
**DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY /APPLIED**  
**COMPUTER SCIENCE**  
**FIRST SEMESTER, 2023/2024**  
**(AUGUST-DECEMBER, 2023)**

**BIT 202/ACMP 225: WEB PROGRAMMING 1**

**STREAM: Y2 S1**

**TIME: 2 HOURS**

**DAY: MONDAY, 12:00–02:00 PM**

**DATE: 20/11/2023**

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**INSTRUCTIONS**

- 1. Do not write anything on this question paper.***
- 2. Answer Question ONE [Compulsory] and any other TWO Questions.***

**Question One**

- Describe any four different techniques in HTML that can be used to create multicolumn layouts (10 marks)
- Explain what you understand by a Responsive Web Design (5 marks)
- Show how margins are used to create space around elements, outside of any defined borders in CSS (10 marks)
- Create an iframe with a URL address that goes to <https://www.whome.com> (5 marks)
- Show how JavaScript can change styles of an html document (5 marks)

**Question Two**

- How is a cookie represented in an HTTP request and an HTTP response? (5 marks)
- Where is the Meta tag only found and what is its purpose? (5 marks)
- Discuss how to create an XML document for storing information about groceries, that includes name, price, and quantity on hand, and the name of its gif image. Include a typical example of the XML file. (5 marks)
- Create a function in JavaScript that enables a system to determine the current date and time. (5 marks)

**Question Three**

- a. Describe with an example how Inline HTML iframes are created (10 marks)
- b. Write JavaScript code to show examples of a global variable and a local variable (5 marks)
- c. Write a for loop in JavaScript which counts numbers between 1 and 10 (5 marks)

**Question Four**

- a. Explain the JavaScript object model. Your answer shall explain prototypes, properties, functions and constructors. (10 marks)
- b. Thoroughly explain the purpose of writing an XML schema? (5 marks)
- c. Explain how HTTP sessions are implemented in PHP. (5 marks)

**Question Five**

- a. Use an example to show how the background color of a page is set using CSS (5 marks)
- b. Describe the Document Object Model, DOM of an HTML document. (10 marks)
- c. Show the correct JavaScript syntax that changes content of a HTML element (5 marks)