



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS

**UNIVERSITY EXAMINATION FOR THE BACHELOR OF INFORMATION
SYSTEM**

4TH 1ST SEMESTER 2022/2023 ACADEMIC YEAR

MAIN CAMPUS

COURSE CODE: ITB 2403

COURSE TITLE: WEB APPLICATIONS DEVELOPMENT

EXAM VENUE: STREAM: BIS

DATE: EXAM SESSION:

TIME: 2.00 HOURS

INSTRUCTIONS:

- 1. Answer Question 1 (Compulsory) and ANY other two questions**
- 2. Candidates are advised not to write on the question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

QUESTION ONE – 30 MARKS [COMPULSORY]

Define the following terms and give the importance of each in web browsing. 6 Marks

- i. Server side scripts
- ii. Cascading style sheet
- iii. Java Server Page

State three roles of client side scripts in an enterprise web-based application. 3 Marks

Explain the why web application development is relevant in the economic development of Kenya? 5 Marks

State the advantages and disadvantages of dynamic websites 4 Marks

Briefly explain two main uses of HTML forms in your web page. 2 Marks

Define a Dynamic web sites 2 Marks

Describe any two methods of protecting your machine from malicious programs from the Internet. (4 Marks)

Distinguish between POST and GET methods in an HTML form. (4 Marks)

)

QUESTION TWO – 20 MARKS

State rules for JavaScript variable names 2 Marks

Describe five major roles of Java Server Pages in your Enterprise Web business Application. 5 Marks

Outline any three benefits of using client side programming in any internet applications 3 Marks

Write Java Script Page code that will validate HTML form elements in a registration form with items of your choice, consisting of at least five text fields and two buttons. 10 Marks

QUESTION THREE – 20 MARKS

Write Down the basic structure of HTML and CSS 5 Marks

Discuss the following components of the web design technology

- i. Web Server 2 Marks
- ii. A web search engine 2 Marks
- iii. Cookies 2Marks

It is now a common trend to see businesses developing websites. Research indicates that websites has influence of image and growth of a business. Explain Five advantages of the website for a business 5 Marks

Write a HTML code that will yield the form in the figure below. 6 Marks

Your Comments

First Name:

Last Name

Phone Number

What did you like about the site

Colour

Design

Which is your best color

Red

Blue

Green

Your Comments

QUESTION FOUR – 20 MARKS

- a) Write PHP code that inserts data from a form to the database 4 Marks
- b) Write an XHTML code that displays the output below on the web page. 6 marks

SAFETY TIPS FOR CANOEISTS

- b. Be able to swim
- c. Wear a life jacket at all times
- d. Don't stand up or move around. If canoe tips,
 - o Hang on to the canoe
 - o Use the canoe for support and
 - o Swim to shore
- e. Don't overexert yourself
- f. Use a bow light at night

Write short notes on the following terms regarding web design.

- i. Selector and declaration 2 marks
- ii. Inline and internal style sheet 2 marks
- iii. Class selector 2 marks

Explain how web technology has and/or can be used to improve the lives people in the African Continent? 4 Marks

QUESTION FIVE – 20 MARKS

- a) Using a diagram explain client server architecture? (4 Marks)
- b) Explain the following validation techniques (6 marks)
- i. Window Confirm () method
 - ii. Window alert () method
 - iii. Window prompt() method
- c) Write a dynamic html code that will produce the out put bellow (6 marks)

Login

UserName:

EmailAddress:

Password:

D) Explain using syntax how the following CSS are used in web application development.

- i. Internal Styles sheet
 - ii. External styles sheet
 - iii. Inline style sheet
- Marks)

(4