



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS

DEPARTMENT OF INFORMATION SYSTEMS

**UNIVERSITY EXAMINATION FOR THE DEGREE BACHELOR OF SCIENCE IN
INFORMATION COMMUNICATION TECHNOLOGY**

YEAR THREE: SEMESTER ONE

4TH YEAR 1ST SEMESTER 2022/2023 ACADEMIC YEAR

MAIN CAMPUS

COURSE CODE: ITB 1405

COURSE TITLE: WEB APPLICATION TECHNOLOGIES

DATE:

TIME:

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**

SECTION A (Theory 30 MARKS)

Questions one

- a) What is PHP and write down the basic structure of PHP **(4 Marks)**
- b) Describe how HTML 5.0 is different from HTML 4.0 **(2 Marks)**
- c) Discuss the following elements as used in Html 5.0 **(1 Marks @)**
- i. The HTML <!DOCTYPE HTML >Element
 - ii. The HTML <section> element
 - iii. The HTML <article> element
 - iv. The HTML <main> element
 - v. The HTML <aside> element
 - vi. The HTML <header> element
 - vii. The HTML <footer> element
 - viii. The HTML <nav> element
 - ix. The HTML <figure> element
 - x. The HTML <template> element
- d) What do you understand by the term Web Standards and how is it relevant to web development as a whole **(2 Marks)**
- e) What should one consider before hosting a website **(4 Marks)**
- f) Write a simple valid HTML forms code that will create the Image below **(8 Marks)**



GeeksforGeeks

Basic form design using HTML

Personal Details

First name :

Last name :

Gender : Male Female

Email :

Date of Birth :

Address :

SECTION B (Theory 40 MARKS)

Question Two

Develop a student's data entry form below using appropriate software such as Notepad++, sublime Text, or Dreamweaver, and various web systems design tools such as HTML, XHTML and CSS. Take note of the colors and character formatting in your design. **(20 Marks)**

STUDENT'S DATA ENTRY FORM

Name:

Student No.

Address:

City:

- Amman
- Amman
- Irbid
- Karak

is foreign?

Male:

Female:

Write short notes on the following terms regarding web design.

- a) Selector and declaration (4 marks)
- b) Inline and internal style sheet (4 marks)
- c) Class selector (4 marks)
- d) FTP and TCP/IP (4 marks)

Intranet and internet

Question Three

What do you understand by client-servernt server architecture? (4 Marks)

What is a markup language and exampleso example of any markup language the you know (6 Marks)

Describe the terms below as they relate to web development and internet in general

(2 Marks @)

- I. IP address and a domain name
- II. Web hosting and World Wide Web
- III. Web browser and a search engine
- IV. Hypertext and hyper link

V. Internal link and external link

Question Four

- a) What is a Client- Server in Java Terms? (2 Marks)
- b) How does Client Server interaction take place? (2 Marks)
- c) Discuss the common object serialization principles in JDK platforms' (6 Marks)
- d) Differentiate between the following terms as used in distributed components programming (6 Marks)
 - i. Remote Interface and Remote Object
 - ii. Asynchronous Messaging and synchronous Messaging
- e) Differentiate between reflection and introspection in java programming (4 Marks)

Questions Five

- a) What is an Enterprise Java(EJB) (5 Marks)
- b) Describe how An *EJB Container* executes an EJB to a client request. (5 Marks)
- c) What are the roles of (EJB) (5 Marks)
- d) Discuss the different types of Java Beans (5 Marks)