



TECHNICAL UNIVERISTY OF MOMBASA

# Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR BACHELOR OF TECHNOLOGY IN  
INFORMATION TECHNOLOGY  
& BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY  
(BTIT/BSIT)

**BIT 2207: INTERNET APPLICATION PROGRAMMING**

END OF SEMESTER EXAMINATION

**SERIES: APRIL 2013**

**TIME: 2 HOURS**

**Instructions to Candidates:**

You should have the following for this examination

- *Answer Booklet*

This paper consists of **FIVE** questions. Attempt question **ONE** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **THREE** printed pages

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**Question One (Compulsory)**

- a) Define the following terms: **(12 marks)**
- (i) Servlet
  - (ii) Applet
  - (iii) Common gateway interface
  - (iv) Internet application
  - (v) Local web server
  - (vi) Remote web server
- b) Describe the factors that make Flash Video (FLV) files suitable for web videos. State any disadvantages of using FLVs **(6 marks)**
- c) List **TWO** characteristics of the following:
- (i) Static web page
  - (ii) Dynamic web page
  - (iii) Server side scripting

- (iv) Client side scripting
- (v) Content management system (10 marks)

d) List **TWO** characteristics of a server application (2 marks)

### Question Two

- a) Define the term web application frame work (2 marks)
- b) List **TWO** popular PHP framework (2 marks)
- c) Explain how a framework helps to alleviate the overhead in web development (4 marks)
- d) Give **FIVE** reasons why you should use a Framework in web application development. (5 marks)
- e) Explain the implementation of a web application Framework using Model view controller MVC. (5 marks)

### Question Three

- a) List **FOUR** application of JavaScript in web development. (4 marks)
- b) Write the PHP/MYSQL code extracts for doing the following:
  - (i) Connecting to the server (3 marks)
  - (ii) Selecting the database and table (3 marks)
  - (iii) Displaying records in a table (4 marks)
  - (iv) Deleting a record (2 marks)
- c) Give **TWO** advantages of each of the following. (6 marks)
  - (i) Apache HTTP server
  - (ii) PHP
  - (iii) MYSQL

### Question Four

- a) A student wants to design and develop an internet application. Explain how he will carry out the following:
  - (i) Analysis
  - (ii) Design and development
  - (iii) Coding
  - (iv) Testing
  - (v) Updating (10 marks)
- b) Write a JavaScript function that asks the user for his name and displays result.
- c) Explain with code examples three types of JavaScript pop up boxes. (6 marks)
  - (i) Alert
  - (ii) Prompt
  - (iii) Confirm

### Question Five

- a) List **FOUR** advantages of using CSS over tables **(4 marks)**
- b) Identify **THREE** standard graphic formats for the web. **(3 marks)**
- c) Differentiate between CSS ID's classes and divisions. **(3 marks)**
- d) Show with code examples the importance of the following PHP functions. **(10 marks)**
  - (i) Isset ()
  - (ii) Die ()
  - (iii) Require once () and include ()
  - (iv) Md 5 ()
  - (v) Strip-tags ()