



TECHNICAL UNIVERSITY OF MOMBASA

INSTITUTE OF COMPUTING AND INFORMATICS
DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR:

REGULAR PROGRAMME

BIT 2207: INTERNET APPLICATION PROGRAMMING

END OF SEMESTER SUP/SPECIAL EXAMINATION

SERIES: DECEMBER 2016

TIME: 2 HOURS

DATE: Pick Date Select Month Pick Year

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

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

Do not write on the question paper.

Question ONE

- a) Describe five useful roles played by a scripting language such as PHP, JSP, ASP or PYTHON on dynamic web page. [5 marks]
- b) Explain the roles played by a web browser, web server software, a scripting language and a database engine during a request/respond operation on a database driven website. [6 marks]
- c) Write a PHP/ASP/JSP object oriented script that displays two fields: first_name and last_name from a database table called people assuming successful database and server connection. [6 marks]
- d) Describe what you understand by a bind variable and explain the use of bind variables improves web application performance and security. [3 marks]
- e) Describe the use and effect of cross-site scripting. [5 marks]

f) Write PHP/JSP/ASP-MYSQLi object oriented script that can be able to connect to a database server [5 marks]

Question TWO

a) Describe four merits of the PHP/JSP/ASP/PYTHON scripting language. [4 marks]

b) What is a PHP/JSP/ASP super global variable? Illustrate with code how a SUPER GLOBAL variable \$GLOBALS is used. [4 marks]

b) Explain four advantages and two disadvantages of WEB frameworks in internet application development [6 marks]

c) The form below has an input field and a submit button that point to the file itself for processing form data when a user submits the data by clicking on "Submit".

d) Show with code how the PHP \$_REQUEST can be used to collect a name submitted an HTML form below.

[6 marks]

Name:

Question THREE

a) Write a PHP script that creates two session variables,tuk and tum and illustrate how the session variables can be removed and destroyed [6 marks]

b) Using a foreach loop, write a PHP extract that uses an array to display four items as shown below.

[4 marks]

1. TUM
2. TUK
3. JKUAT

c) Write a PHP script that uses a function to output the following results. [5 marks]

$$5 + 10 = 15$$

$$7 + 13 = 20$$

$$2 + 4 = 6$$

d) Assuming a successful server connection, database and table selection, write a PHP/JSP/ASP code that will delete the third record from a table. [5 marks]

Question FOUR

a) Define the term mobile web application. [2 marks]

b) List four main platforms for creating mobile apps. [4 marks]

c) Describe four disadvantages of Mobile native applications. [6marks]

d) Write the PHP-MYSQL object oriented code extract that inserts a first name, a last name and an email into a table called students with fields: firstname, lastname and email. The script should give feedback regarding the insertaion. Assume the server connection and database selection was successful.

[8 marks]

Question FIVE

a) Define the term prepared statement in the context of PHP/JSP/ASP and MYSQL. [2 marks]

b) Describe three advantages of using prepared statements. [6 marks]

c) Assuming successful server connection and database selection, write the PHP-MYSQL code that updates the 2nd record in a table . [5 marks].

d) Differentiate between the \$_GET method and the \$_POST method as used with PHP. [3 marks]

e) Give two conditions for using the \$_GET method two conditions for using the \$_POST. [4 marks]

GET