



TECHICAL UNIVERSITY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA IN INFORMATION TECHNOLOGY (DIT/JAN2010)

EIT 2210: INTERNET APPLICATION PROGRAMMING I

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: JULY 2014

TIME ALLOWED: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*

This paper consist of **FIVE** questions
 Answer any **THREE** questions. Question **ONE** is compulsory
 Maximum marks for each part of a question are as shown
 This paper consists of **TWO** printed pages
Section A (COMPULSORY)

Question One

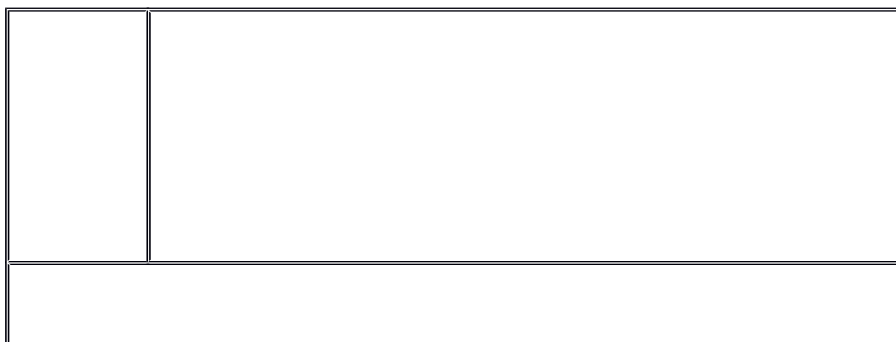
- a) Explain the purpose of the following protocols:
 - (i) Client-server protocol
 - (ii) Hypertext Transfer protocol (4 marks)
- b)
 - (i) State the importance of hyperlinks in a web pages
 - (ii) What are the two HTML elements that you need to specify to enable hyperlinks? As you explain, give the tag for each element. (6 marks)
- c)
 - (i) Explain the term internet
 - (ii) Describe the function of Web Browsers [4 marks]
- d) Briefly distinguish between Static Website and Dynamic Website [4 marks]
- e)
 - (i) State any two web authoring tools (2marks)
 - (ii) Explain how asp tags are entered in asp document (2marks)
- f) Outline the life-cycle model of web site design, giving a brief description. (6 marks)

Question Two

- a) List and explain **THREE** uses of cookies in internet application programming (6 marks)
- b) Describe the term MIME in respect to Internet programming (2 marks)
- c) What is the difference between the web form’s GET and POST methods (4 marks)
- d) Differentiate between dynamic and static web pages (4 marks)
- e) Using an appropriate diagram, explain how an internet application works (5 marks)

Question Three

- a) Write html codes that will divide a web page into three windows, with each window displaying a separate as shown in the sketch below; with each window displaying a web page:



(5 marks)

- b) State any **six** factors to consider when designing a web site (6 marks)

- c) Explain what you understand by the statement ‘HTTP is stateless’. (4 marks)

Question Four

- a) College maintains student database on its web server. A table called Student includes among the fields Student_Name, Admission_no and feesbalance. The database can be accessed online. Write HTML codes to create a form shown below to accept Admission_no and send to the web server. Write a server side script using ASP scripting language to process user input search the table and return the feesbalance if the Admission_No is found else display the appropriate message.

Top of Form

Name:

Admission No:

Fees Balance

Cancel

(10 Marks)

- b) Distinguish between the following:
- i) Response.Redirect method and
 - ii) Server.Transfer Method (4 Marks)
- c) Explain the concept of 'channel' as applied to Web technology (2 Marks)
- d) Explain the following:
- i) Home Directory
 - ii) Virtual Directory (4 Marks)

Question Five

- a) Increasing awareness is one strategic practice for protecting web applications in today's organizations. List and explain THREE ways in which this can be achieved (6 marks)
- b) Outline FOUR advantages of client server architecture (4 marks)
- c) Explain TWO areas in which HTML falls short as a tool for web application development (2 marks)
- d) Describe web application lifecycle (8 marks)
- e) Name and describe FIVE web security issues affecting today's web applications (10 marks)