



[Knowledge for Development]
KIBABII UNIVERSITY

**UNIVERSITY EXAMINATIONS
2015/2016 ACADEMIC YEAR**

**END OF SEMESTER EXAMINATIONS
YEAR ONE SEMESTER TWO EXAMINATIONS**

**FOR THE DEGREE OF
MBA WITH IT**

COURSE CODE : MBIT 823

COURSE TITLE : WEB PROGRAMMING

DATE: 12/05/2016

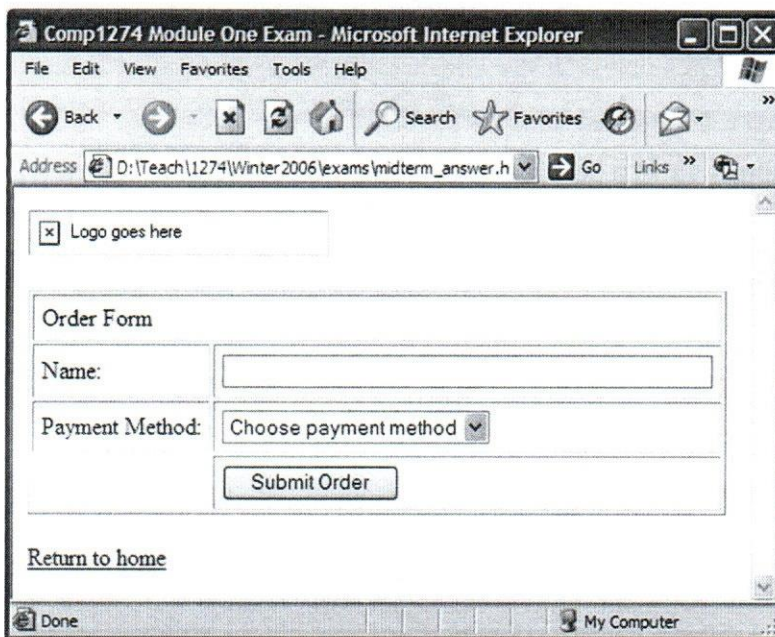
TIME: 2.00PM-4.00PM

**INSTRUCTIONS TO CANDIDATES
ANSWER ANY THREE QUESTIONS**

Question 1**(20 marks)**

- 1) Create a web page that has: An HTML page named `questionSix.html` that has a form that allows users to enter their name in a textbox, their province from a drop-down list (containing AB, BC, and SK as the options), and a numeric rating from 1-5 via radio buttons. [7 marks]
- 2) Write the HTML for achieving the results in the following screen capture. Include all the tags necessary to make this a complete and valid HTML file. [13 marks]

Assume the missing image at the top of the screen is called `logo.gif` and is in the same directory as your HTML file. The underlined Return to home in the screen below is a hyperlink for `home.html`. The payment method drop-down list should also contain Visa and Mastercard options. Don't worry about CSS or formatting. The Submit Order button should send the form information within the http header to `http://www.abc.com/process.asp`. Be sure to use valid XHTML (strict or transitional).

**Question 2****(20 marks)**

- a) Why is it important to separate content from presentation? List some of the ways of separating content from presentation when constructing web sites. [6 marks]
- b) Most real-world web sites are hosted on multiple web servers. What are the advantages and disadvantages of doing so? [4 marks]
- c) Validation of user input should occur at multiple levels. What are these levels and why is it important to do so? [4 marks]
- d) Describe exactly how cookies work [6 marks]

Question 3**(20 marks)**

- a) Content Management Systems have proponents and detractors, with each side having valid reasons for liking or disliking the concept of Content Management Systems. Choose one side and give at least 5 persuasive and factual reasons to support your claim. [8 marks]
- b) Why is it important to test your web page on multiple browsers? [2 marks]
- c) Describe 5 security practices that a website administrator should implement on all their web sites. [5 marks]
- d) Discuss the relationship between server farms, data centers and Internet Exchange Point providing a clear definition for each. [3 marks]
- e) What actions can you perform to mitigate the impact of a data breach? [2 marks]

Question 4**(20 marks)**

- a) What are the advantages of packet switching in comparison to circuit switching? [3 marks]
- b) Describe the relative advantages and disadvantages of web-based applications in comparison to traditional desktop applications. [5 marks]
- c) What is an intranet? [2 marks]
- d) Distinguish between a dynamic web page and a static page. [2 marks]
- e) Describe the four layers in the four-layer network model. [4 marks]
- f) What are layers and why are they used? Compare and contrast the strengths and weaknesses of using a two-layer versus three-layer architecture for web applications. [4 marks]

Question 5**(20 marks)**

- a) What are the three components of the CIA security Triad? [3 marks]
- b) Outline the three types of authentication. [3 marks]
- c) Distinguish between authentication and authorization, explaining why a two-factor authentication is more secure than single factor. [5 marks]
- d) Briefly explain how the secure by design principle gets applied in the software development lifecycle? [3 marks]
- e) Who are the three types of Actor that could compromise a system? [3 marks]
- f) Describe in brief the 3 areas associated with information security [3 marks]