



(Knowledge for Development)

KIBABII UNIVERSITY

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**UNIVERSITY EXAMINATIONS
2017/2018 ACADEMIC YEAR**

**END OF SEMESTER EXAMINATIONS
YEAR 2 SEMESTER 2**

**FOR THE DEGREE OF
MASTER OF SCIENCE (INFORMATION TECHNOLOGY)**

COURSE CODE : MIT 842E

COURSE TITLE : WEB TECHNOLOGIES & APPLICATIONS

DATE: 19/10/2018

TIME: 2.00 PM – 5.00 PM

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS.

ALL QUESTIONS CARRY 20 MARKS EACH

Question One (20 Marks)

- a) Web technologies are used to develop web applications. Explain what web technologies are. 4mks
- b) How do servlets work? And why use servlets in developing applications? 6mks.
- c) You have been hired by a company ABC to advice on a good e-Commerce, which principles will you use to complete this assignment? 6mks
- d) Implementation of Secure Electronic Transaction protocol (SET) has some big drawbacks. What are the issues with SET? 4mks

Section B Attempt any TWO questions**Question Two (20 Marks)**

- a) Explain what is a Web application giving examples? 4mks
- b) Describe Representational State Transfer stating the architectural constraints it provides. 8mks
- c) Outline the Typical HTTP Conversation 3mks
- d) An online marketplace (or online e-commerce marketplace) is a type of e-commerce site where product or service information is provided by multiple third parties, whereas transactions are processed by the marketplace operator. Give the Sad State of Today's e-Commerce Marketplace 5mks

Question Three (20 Marks)

- a) Secure Socket Layer (SSL) is used to encrypt transaction in web application. Why should you encrypt? 4mks
- b) Discuss the following in relation to Caching Servers 8mks
 - i. The overall purpose
 - ii. General issues
- c) Give the purpose of Simple Object Access Protocol and explain how it works 3mks
- d) Common Gateway Interface (CGI) is a traditional way to handle web-to-database applications. How does CGI traditional approach work? 5mks

Question Four (20 Marks)

- a) Web Conferencing is popular now. Interpret the following as concerns web conferencing
 - i. Differences and typology 3mks
 - ii. Why Conference? 3mks
 - iii. Different Conferencing Data Streams 4mks
 - iv. Conferencing Issues 5mks
- b) Describe HTTP(HyperText Transfer Protocol) as a core web technology 5mks

Question Five (20 Marks)

- a) Explain four concerns that must be addressed for internet applications 8mks
- b) Why would you use Wireless Markup Language and not Hypertext Markup Language? 7mks
- c) Give FIVE important reasons why you would use XML in web development 5mks