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[*Knowledge for Development*]

KIBABII UNIVERSITY

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**UNIVERSITY EXAMINATIONS
2020/2021 ACADEMIC YEAR**

**END OF SEMESTER EXAMINATIONS YEAR
THREE SEMESTER TWO EXAMINATIONS
FOR THE DEGREE IN BACHELOR OF SCIENCE
IN
(INFORMATION TECHNOLOGY)**

**COURSE CODE : BIT 416
COURSE TITLE : ENTERPRISE
APPLICATION DEVELOPMENT**

DATE: 15/06/ 2021

TIME: 2:00 P.M – 4:00 P.M.

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTIONS ONE AND ANY OTHER TWO.

QUESTION ONE [COMPULSORY] [30 MARKS]

- a. Explain the functions of the following teams as used in enterprise application development: [8 marks]
- i. Product management
 - ii. Program management
 - iii. Development
 - iv. Test and Quality assurance
- b. Explain the three tier architecture using enterprise application development goals. [4 marks]
- c. Distinguish between a method and methodology as used in analysis and design of business applications. [4 marks]
- d. Explain the three fundamental principles of user interface design. [6 marks]
- e. Explain the three characteristics of enterprise applications [6 marks]
- f. State any two team roles identified in the team model. [2 marks]

QUESTION TWO [20 MARKS]

- a. What is the differences between inner class and nested class, public and a non-public class, prefix and postfix forms of the ++ operator, method overriding and overloading, if statement and a switch statement, a break statement and a continue statement, Boolean & operator and the && operator, a field variable and a local variable? [6marks]
- b. Discuss the enterprise application model for developing enterprise applications. [6 marks]
- c. Distinguish between an object and a class. [4 marks]
- d. As an enterprise developer discuss the reasons why you building a project organization on a small, mutually- interdependent team. [4 marks]

QUESTION THREE [20 MARKS]

- a. Explain what you understand by scaling the team roles. [2 marks]
- b. Distinguish between the spiral model and agile model of application development. [4 marks]
- c. Describe the general pattern for traversing the enterprise model during application design. [6 marks]
- d. A big advantage of using the Enterprise Application Model as a design guide is that it lets you start anywhere. Explain [6 marks]

- e. What are the functions of clients and servers in client server application models?[2 marks]

QUESTION FOUR [20 MARKS]

- a. To design an enterprise application you must consider and balance an enormous array of application requirements. Explain [6 marks]
- b. Distinguish between a method and methodology as used in analysis and design of business applications. [4 marks]
- c. Explain what you understand by the term Project plan. [2 marks]
- d. Distinguish between inheritance and polymorphism as used in Java Programming language. [4 marks]
- e. State and explain any four Business logic tools that you can use to develop an enterprise application. [4 marks]

QUESTION FIVE [20 MARKS]

- a. With examples explain the overall team structure used for enterprise application development. [12marks]
- b. Distinguish between an object and a class. [4marks]
- c. Explain how the business model interacts with the technology model in enterprise application development. [4marks]