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University Examinations 2023/2024

THIRD YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF INFORMATION TECHNOLOLOGY AND BACHELOR OF BUSINESS INFORMATION TECHNOLOGY

CIB 3351: ENTERPRISE SYSTEMS DEVELOPMENT

DATE: APRIL 2024   **TIME: 2 HOURS**

INSTRUCTIONS: *Answer question **one** and any other **two** questions*

QUESTION ONE (30 MARKS)

a) Discuss the strategies for optimizing system performance, provide examples of how performance optimization contributes to a responsive and efficient system.   (4 Marks)

b) Define enterprise system development? Briefly highlight its importance in modern business environments.   (5 Marks)

c) Highlight the benefits of enterprise system development (ESD) principles in the development process.   (4 Marks)

d) Differentiate the types of system requirements in ESD?   (4 Marks)

e) Briefly highlight the difference between SCM, Bl and I-IRIS?   (3 Marks)

f) Outline the challenges in requirements specification?   (4 Marks)

g) Using relevant examples, define business process modelling.   (4 Marks)

h) Discuss any two reasons for ERP consideration in the enterprise   (2 Marks)

QUESTION TWO: (20 MARKS)

a) Identify two aspects of UML in enterprise system development.   (2 Marks)

b) Define SCOR? Identify its five major processes.   (6 Marks)

c) Outline the roles of design artifacts in ESD projects.   (6 Marks)

d) Identify the security measures to be enforced during enterprise system implementation to ensure interoperability   `   (6 Marks)

QUESTION THREE: (20 MARKS)

a) Identify and define with examples, three types of integration in enterprise systems.

(6 Marks)

b) Identify two supply chain models. Which is better?   (4 Marks)

c) Highlight the two major challenges with corresponding solutions experienced during integration of Entreprise Systems in a digital firm   (4 Marks)

d) Describe Application Programming Interface integration, Middleware and data synchronization as applied in entreprise system integration   (6 Marks)

QUESTION FOUR: (20 MARKS)

a) Highlight your understanding of security in ESD implementation, and briefly define three security measures applicable with a relevant example.   (7 Marks)

b) Elucidate the challenges experienced during ESD implementation, outlining the strategies to overcome those challenges.   (5 Marks)

c) Discuss the importance of testing in identifying and resolving issues before and after implementation.   (4 marks)

d) Highlight the various types of testing, including unit testing, integration testing, and user acceptance testing.   (4 Marks)

QUESTION 5: (20 MARKS)

a) Describe the four strategies organizations must use to meet the challenges posed by the new information technology infrastructure. (4 Marks)

b) Explain how adhering to quality assurance practices ensures a reliable and high-performing system. (6 Marks)

c) Explore quality assurance methodologies that ensure successful ESD implementation. (3 Marks)

d) Discuss the importance of designing systems that can scale to accommodate growing user demands. (7 Marks)