



MACHAKOS UNIVERSITY

University Examinations for 2022/202

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

FOURTH YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE (COMPUTER SCIENCE)

SCO 419 ENTERPRISE RESOURCE PLANNING

DATE:

TIME:

INSTRUCTIONS

This paper consists of five questions

Answer question **ONE** and other **TWO** questions in this paper.

QUESTION ONE (COMPULSORY) (30 MARKS)

- (a) Describe Enterprise Resource Planning system. (2 marks)
- (b) A university has implemented an ERP system. Explain **three** benefits the university is likely to accrue from this system. (6 marks)
- (c) James uses a system that has incorporated Business Intelligence capability. Explain **two** importance of such a system. (4 marks)
- (d) Explain **five** factors considered when planning the implementation of an ERP system in an organization (5 marks)
- (e) Distinguish between *Business Process Modelling* and *Business Reengineering* as used in ERP systems. (4 marks)
- (f) ERP system implementation team consists of people from various specializations. Outline **four** such specializations. (4 marks)
- (g) A supermarket has used a lot of money in maintaining an ERP system. Explain **five** ways that it could have used to reduce this cost. (5 marks)

QUESTION TWO (20 MARKS)

- (a) Describe **two** approaches used in ERP system implementation. (4 marks)
- (b) Jane, a computer science intern has been assigned to assist in ERP system evaluation. Explain **four** factors that would be considered during this evaluation. (8 marks)
- (c) An ERP system generates a lot of data commonly referred to as big data. Explain four characteristics of this data. (8 marks)

QUESTION THREE (20 MARKS)

- (a) Describe **three** emerging issues in ERP systems. (6 marks)
- (b) Analyze **three** benefits that a company may derive from good data migration. (6 marks)
- (c) A student intends to create an ERP system for a farmer's co-operative society. Describe **four** functional modules that he is likely to include in the system. (8 marks)

QUESTION FOUR (20 MARKS)

- (a) Explain each of the following terms as used in ERP systems.
 - (i) Data mining (2 marks)
 - (ii) Data Analytics (2 marks)
 - (iii) Data interpretation (2 marks)
- (b) Explain **six** success factors of Business Process Management in a company (6 marks)
- (c) Explain **four** activities involved in the pre-purchasing sub module (8 marks)

QUESTION FIVE (20 MARKS)

- (a) Outline **three** modules in a SAP (3 marks)
- (b) Discuss **three** factors considered in the security of a SAP Application. (6 marks)
- (c)
 - (i) A student stored data in a data warehouse. Outline **three** benefits of this form of storage. (3 marks)
 - (ii) Outline two disadvantages of OLAP system. (2 marks)
- (d) Outline the activities carried out during the Planning Phase of an ERP development project. (6 marks)