



MURANGA UNIVERSITY COLLEGE

(A constituent College of Jomo Kenyatta University of Agriculture & Technology)

DEPARTMENT OF COMMERCE

BACHELOR OF BUSINESS INFORMATION TECHNOLOGY

DURATION: 2 HOURS

ICS 2206: DATABASE SYSTEMS

2014/2015 ACADEMIC YEAR

7TH AUGUST 2015

SUPPLEMENTARY/SPECIAL EXAMS

Instruction

ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS

QUESTIONS ONE

- What are the elements of a database in DBMS (4marks)
- Give five reasons why null values might be introduced into the database (5marks)
- Enlist and explain five characteristics of data in a database (5marks)
- What are the main benefits of using a DBMS to manage data applications involving extensive data access (5marks)
- What is the use of SELECT statements in DBMS give the syntax of select statement and explain the various options (4marks)
- Construct an ER- diagram for hospital with a set of patients and a set of medical doctor's .associate with each patient a log of the various tests and examinations conducted. (7marks)

QUESTIONS TWO

- Explain the following key definition with examples (9marks)
 - Candidate key
 - Primary key
 - Foreign key

b) What is column constraint as used in DBMS ? Explain with an example (5marks)

(C) What is data integrity? Explain the following integrity constrains as used in DBMS with Examples

- General constraint
- Domain constraint
- Integrity constraint (6marks)

QUESTIONS THREE

- a) Describe six principles functions of a database administrator (12marks)
- b) Briefly discuss the architecture of database management systems. Use a well labeled diagram to illustrate your concept (8marks)

QUESTIONS FOUR

- a) Explain the different types of relations between the entities in a table in relation to DBMS. (8marks)
- b) State And explain The Three parameters used to determine a good quality of information (6marks)
- c) Identify and briefly explain six principles services provided by DBMS. (6marks)