UGANDA MARTYRS UNIVERSITY

UNIVERSITY EXAMINATIONS
FACULTY OF SCIENCE

DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION SYSTEMS

END OF SEMESTER FINAL ASSESMENT

(NKOZI & LUBAGA)

SEMESTER 1, 2022/2023

COURSE	:	**BACHELOR OFSCIENCE IN INFORMATION TECHNOLOGY, BACHELOR OF SCIENCE IN COMPUTER SCIENCE & BACHELOR OF SCIENCE WITH EDUCATION - YEAR 3**
PAPER	:	**DATA WAREHOUSING AND BUSINESS INTELLIGENCE**
CODE	:	**CSC 3101**
SEMESTER	:	**ONE**
DATE	:	**15TH DECEMBER 2022**
TIME	:	**9:30 – 12:30 PM**
DURATION	:	**3 HOURS**

Instructions

1. *Attempt four Questions*
2. *Time Allowed 3 Hours Only*
3. *Use of relevant Illustrations/diagrams will earn you a bonus mark (s)*
4. *Remember to indicate the question number you have answered.*
7. *Write your name, course and registration number on all your answer sheets*
5. *All answers should be written on the answer booklet*
9. *All university rules apply*

QUESTION ONE (25 MARKS)

a) Business intelligence is usually interchanged with data mining. Using your own terms describe what you understand by these two terms

b) For any processing to be done, one has to do data preprocessing. Describe the different activities carried out during the preprocessing phases for data mining

c) Explain what can be done when there are missing values in data during data cleaning.

d) Describe at four applications of Data mining and Business intelligence

e) Describe the data integration as used in business intelligence

QUESTION TWO (25 MARKS)

a) Data and dataset are described by attributes. With relevant examples describe the different attributes know in data mining

b) How is noise handled in data mining as a step in data cleaning?

c) With examples illustrate the difference between closed and maximum pattern

QUESTION THREE (25 MARKS)

a) Frequent patterns are the basis of the bucket analysis as data mining application. With relevant examples explain what is meant by Frequent Patterns

b) Describe with relevant examples how the Apriori Algorithms works

QUESTION FOUR (25 MARKS)

a) Describe at least 4 measure of tendency as used in Data analytics and Business Intelligence

b) With relevant illustrations, describe the following terms as used in data mining

i. Positively Skewed

ii. Negatively Skewed

iii. Normal

c) Give the difference between Correlation and regression

QUESTION FIVE (25 MARKS)

Using the table below answer the questions that follow. The table shows students with their respective age and marks got in one of the courses they studied.

a) Compute the mean Mark of all students

b) Compute the median of the age of all students

c) Describe how you would determine the maximum Mark

d) You have been told to identify the relationship between age and marks. Describe at least one method using in data analysis you would adopt to determine the relationship between the two variables

Name (string)	Age (int)	Mark (int)
Joseph	32	68
Brian	40	89
Bellamy	1	94
Martina	5	80
Gloria	28	50
Loyce	24	63
Harrison	4	76

THE END