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**W1-2-60-1-6**

**JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY**

# University Examinations 2015/2016

**YEAR IV SEMESTER II EXAMINATION FOR THE DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY**

# BIT 2210: BUSINESS INTELLIGENCE

**DATE: AUGUST, 2016**  **TIME: 2 HOURS**

**INSTRUCTIONS: Answer Question ONE and Any Other TWO Questions.**

**Question One – 30 Marks**

a) Define the following terms as used in business intelligence. [2 marks each]

1. Data warehouse
2. Data mining
3. Dart marts

b) Outline the goals of data integration in business intelligence. [4 marks]

c) Briefly explain the drives of business intelligence. [4 marks]

d) Describe the applications of data mining. [3 marks]

e) Using an elaborate diagram describe business intelligence architecture and components. [6 marks]

f) Explain the limitations of dimensionality in business intelligence. [4 marks]

g) Discuss the importance of visualization in data warehouse and data mining. [3 marks]

**Question Two – 20 Marks**

a) Using a diagram, discuss data warehousing process giving the advantages and disadvantages. [10 marks]

b) Explain the stages of data extractions in a data warehouse. [8 marks]

c) Highlight the types of meta data in a data warehouse. [2 marks]

**Question Three – 20 Marks**

a) Discuss how geographic information systems are used to improve decision making in the public and private sectors. [8 marks]

b) State and explain the requirements of online analytical processing (OLAP) server. [6 marks]

c) Differentiate between data warehouse and data mart. [6 marks]

**Question Four – 20 Marks**

a) Discuss any five most commonly used techniques in data mining. [10 marks]

b) Outline the benefits of business intelligence. [4 marks]

c) Explain two advantages of dart marts. [2 marks]

d) Distinguish between OLTP and OLAP. [4 marks]