THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)

Faculty of Engineering and Technology

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

**UNIVERSITY EXAMINATION FOR DEGREE IN
BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY (BSc. I.T. 9S)
YEAR III, SEM II**

ICS 2405: KNOWLEDGE BASES SYSTEMS

END OF SEMESTER II EXAMINATION

SERIES: DECEMBER 2011

TIME: 2 HOURS

Question 1   [20 Marks]

Describe the characteristics of data, information and knowledge, explaining how these three concepts are related.

Question 2   [20 Marks]

Describe the value of knowledge-based systems. What types of areas can knowledge-based solutions be applied to? What are some challenges of knowledge-based systems?

Question 3   [20 Marks]

What is the difference between declarative knowledge and procedural knowledge? Explain and give examples of the following types of knowledge: facts, rules and heuristics.

Question 4   [20 Marks]

What is an inference engine? Explain forward chaining and backward chaining.

Question 5   [20 Marks]

Describe some sources of knowledge and some methods of acquiring it. What challenges are faced in knowledge acquisition?