

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

## JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

**UNIVERSITY EXAMINATIONS 2016/2017**

**SEMESTER 2 EXAMINATIONS FOR THE DIPLOMA IN INFORMATION TECHNOLOGY**

**DIT 0505: ADVANCED OBJECT-ORIENTED PROGRAMMING**

**DATE: JULY 2017 TIME: 1.5 HOURS**

INSTRUCTIONS: ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO

QUESTION ONE

a) State and explain four object oriented concepts (8 marks)

b) State and explain different stream classes used in java (12 marks)

QUESTION TWO

a) State and explain the two sets of java API’s used for graphics programming (4 marks)

b) State and describe five exception methods used in java (10 marks)

c) Write a short code that will display the image below (6 marks)

QUESTION THREE

a) Define the following (8 marks)

i) Network

ii) Address

iii) Node

iv) Socket

b) Give seven basic operations of a socket (7 marks)

c) State any five java database components (5 marks)

QUESTION FOUR

a) State three common databases used in java (3 marks)

b) State three tasks that the JOBC library is associated with (3 marks)

c) Write java code to pop up an option pane asking the user for his or her age. If the user types a number less than 40, respond with a message box saying that he/she is young. Otherwise respond with a message saying Hello (14 marks)