



THE CATHOLIC UNIVERSITY OF EASTERN AFRICA

A. M. E. C. E. A

CAT 2

P.O. Box 62157

00200 Nairobi - KENYA

Telephone: 891601-6

CONTINUOUS ASSESSMENT TEST

AUGUST-DECEMBER 2023 TRIMESTER

DEPARTMENT OF COMPUTER & INFORMATION SCIENCE

CMT 210: OBJECT ORIENTED PROGRAMMING I

Date: November 28, 2023

TIME: 9:00-10:30AM

INSTRUCTIONS:

1. Before starting your CAT, create a folder on the Desktop bearing your registration number only. This is the folder where you will save all exam practical work
2. Answer all the questions in this CAT
3. Ensure you submit your folder to the examiner at the end of exam period.
4. Confirm your work before handing in your work to the examiner.

1. You are supposed to create python-based program containing two classes; product and ProductType.

The program should display the following menu when a user executes the program

Product Catalogue

1. Add new product
2. Search Product
3. Exit

(2 marks)

When a user selects an option from the keyboard, the program should call the most appropriate method

If a user selects option one, the program should invoke method define in i and ii below

(1 mark)

If a user selects option two, the program should invoke method defined in iv below

(1 mark)

If a user selects option three, menu should exit (1 mark)

The menu should keep on repeating provided the user has selected option 1 and 2 from the keyboard (1 mark)

Information about the program

- i Product class should define a default constructor which initializes all product prices to Kshs. 0.00 (2 marks)
- ii Product class should also define another method which captures product name, code and description (3 marks)
- iii Class ProductType inherits from class product and define a method which accepts price, category of a product (2 marks)
- iv Class ProductType should define a method which accepts Mini price, maximum price and product category then displays price, product name and description if the values keyed matches values in i and ii above else display appropriate feedback (5 marks)
- v Implement the following menu Debug and test your program (2 marks)

*****END*****