BOWEN UNIVERSITY IWO, OSUN STATE
COLLEGE OF COMPUTING AND COMMUNICATION STUDIES
COMPUTER SCIENCE PROGRAMME
B. SC. DEGREE FIRST SEMESTER EXAMINATION   SESSION: 2022/2023
COURSE CODE: CSC 202   COURSE TITLE: COMPUTER PROGRAMMING II
COURSE CREDIT: 3
DATE: TIME ALLOWED: 2 HOURS 30 MINUTES
INSTRUCTION: Answer question one and any other three questions

Question 1
   a. Write a Python program that prints the calendar for a given month and year **(10marks)**
   b. Write a Python program to get the area of a circle with radius 10 using pie as 3.142 and $A = \pi r^2$ **(10marks)**
   c. Write a Python program that accepts a sequence of comma-separated numbers from the user and generates a list and a tuple of those numbers   **(10marks)**
   d. Write a Python program to calculate the number of days between two dates (2016, 7, 2) and (2018, 7,11) as the first and last dates   **(10marks)**

Question 2
Write short note on the following programming elements
   a. Variables
   b. Data structure
   c. Syntax
   d. Tools
   e. Control structure   **(4marks each)**

Question 3
Identify and explain with diagrams any 5 structural programing rules   **(20marks)**

Question 4
   a. Python and C++ are high level programming language with similarities and differences. In a tabular format, explain the difference.   **(15marks)**
   b. Explain what you understand by primitive and non-primitive data type   **(5marks)**

Question 5
Using a diagram explain primitive and non-primitive data structures in python   **(20marks)**

Question 6

a. List and explain any three control structures in programming   **(15marks)**

b. Highlight any five reasons why python is a widely used programming language.

                                                             (5marks)