Total No. of printed pages = 2

ECE 181602

Roll No. of candidate

2022

B. Tech 6th Semester End-Term Examination

ADVANCED PROGRAMMING

(New Regulation & New Syllabus)

Full Marks – 70   Time – Three hours

The figures in the margin indicate full marks for the questions.

Programming language to be use: Python

Answer Question No. 1 and any Four from the rest.

1. Answer the following: (MCQ)   (10 ×.1 = 10)

   (i) Which of the following is the use of function in python?

      (a) Functions are reusable pieces of programs

      (b) Functions don't provide better modularity for your application

      (c) You can't also create your own functions

      (d) All of the mentioned

   (ii) If return statement is not used inside the function, the function will return:

      (a) None   (b) 0

      (c) Null   (d) Arbitrary Value

   (iii) Which of the these is not a fundamental feature of OOP?

      (a) Encapsulation   (b) Inheritance

      (c) Instantiation   (d) Polymorphism

   (iv) A term for simultaneous access to a resource, physical or logical

      (a) Multiprogramming   (b) Multitasking

      (c) Threads   (d) Concurrency

   (v) A single sequential flow of control within a program is _____

      (a) Process   (b) Task

      (c) Thread   (d) Structure

   (vi) Which of the following is used placed after if condition?

      (a) ;   (b) :

      (c) ,   (d) .

[Turn over

(vii) Object and class attributes are accessed using —————— notation in Python

    (a) Dot(.)   (b) self

    (c) object   (d) function

(viii) Which one of the following is correct way of calling a function?

    (a) function_name()

    (b) call function_name()

    (c) ret function_name()

    (d) function function_name()

(ix) Which keyword is used to come out of loop only after iteration?

    (a) break

    (b) continue

    (c) return

    (d) None of the mentioned

(x) A single program of OOPS contains ———— classes?

    (a) Only 1   (b) Only 999

    (c) Only 100   (d) Any number

2. (a) Define Class and Object. What are the limitations of inheritance? (7)

    (b) Differentiate between parameterized and non-parameterized constructor. Give an example for both. (8)

3. (a) Explain the operators in python with example. (5)

    (b) Explain thread, Synchronizing threads, Multi-threaded Priority Queue, multi-processing module with an example. (10)

4. (a) How a function is declared in python? What are the different types of function in python? Explain with examples. (10)

    (b) Write a python programming for a function in at will find factorial of any number.

5. (a) What is the Difference between Abstraction and Encapsulation in Python? Explain with an example (write complete program in python). (10)

    (b) Explain inheritance in python with example. (5)

6. Define recursive function with an example. Describe function overloading and overriding with an example. (15)

7. (a) Describe Socket in networking. How to import Socket Module in python? (7)

    (b) Define: Match function, Search function. Differentiate between Matching and searching. (8)