323104

January 2023
B.Sc. (Maths/Physics/MAC) 1st Semester
Introduction to programing (OCSC-101A)

Time : 3 Hours]   Max. Marks :75

Instructions :

1. *It is compulsory to answer all the questions (1.5 marks each) of Part-A in short.*
2. *Answer any four questions from Part-B in detail.*
3. *Different sub-parts of a question are to be attempted adjacent to each other.*

PART–A

1. (a) Write down any 4 header files and explain their roles.   (1.5)

   (b) What is bit-wise operator?   (1.5)

   (c) Differentiate object-based and object-oriented Programming languages.   (1.5)

   (d) Differentiate While and Do-While loop.   (1.5)

   (e) Differentiate break and continue statement with appropriate example.   (1.5)

(f) What are In-line functions? (1.5)

(g) Explain Command Line arguments. (1.5)

(h) Define Class Constructors in brief. (1.5)

(i) Explain Function Overloading in brief. (1.5)

(j) Explain the role of Friend function. (1.5)

PART –B

2. (a) Write program to compute power of a number using recursive function. (10)

(b) Differentiate Structures and Union. (5)

3. (a) Explain Switch-case statement with appropriate example. (5)

(b) Explain Character I/O, Formatted and Console I/O in detail. (10)

4. What are conditional statements? Write code for appropriate application using conditional statements. (15)

5. (a) Define Polymorphism in brief. (5)

(b) Differentiate Call by Value and Call by Reference with appropriate example. (10)

6. (a) Explain Operator Overloading with appropriate example. (10)

(b) Explain basic file functions. (5)

7. Explain type of inheritance with appropriate example and also write C++ (15) program to show multi-level inheritance. (15)

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