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H-7122

M.Sc. (Semester-II) Examination, Julyb 2022

COMPUTER SCIENCE

(Object Oriented Programming Concepts in C++)

Time Allowed : Three Hours

Maximum Marks : 70

Minimum Passing Marks : 25

Note : Question paper is divided into four sections. Attempt questions of all four sections as per given direction. Distribution of marks is given in each section.

SECTION - A

Note : Attempt **any ten** questions. Each question carries **1** mark.

[10×1=10]

1. Objective type / fill in the blanks / Multiple choice type :

   (i) The default return type of function is ____ .

   (ii) C++ Language is case ____ .

(iii) Smallest individual unit in a program is known as a ____.

(iv) _____ Operator in C++, requires three Operands.

(v) Break terminates the ____ loop.

(vi) What does a C++ class hold?

(a) Function

(b) Data

(c) Arrays

(d) Both (a) and (b)

(vii) What is an object in C++?

(a) Function of class

(b) Instance of class

(c) Datatype of class

(d) Syntax of class

(viii) Total types of constructor in C++ are?

(a) 1

(b) 2

(c) 3

(d) 4

(ix) When can an inline function be expanded?

(a) Runtime

(b) Compile time

(c) Never gets expanded

(d) All of the above

(x) Identify the logical and operator :

(a) | |

(b) &&

(c) &

(d) !

(xi) The constants in C++ are also known as :

(a) Pre-processor

(b) Literals

(c) Const

(d) None of the above

(xii) What is the ASCIT value of '\0' character?

(a) 32

(b) 24

(c) 48

(d) 0

SECTION - B

(Very Short Answer Type Questions)

Note : Attempt **any five** questions. Each question carries **2** marks. Maximum word limit is 25-30 words. [5×2=10]

2. (i) Explain File Pointer.

(ii) Explain need of exception handing in detail.

(iii) Explain Template function.

(iv) Explain Data types of C++.

(v) Define Abstract function.

(vi) Explain inline function.

(vii) Define OMT.

SECTION - C

(Short Answer Type Questions)

Note : Attempt **any five** questions. Each question carries **4** marks. Maximum word limit is 250 words. [5×4=20]

3. (i) Explain Virtual class in detail.

(ii) What is friend function? Explain.

(iii) How can we resolve ambiguity in C++? Explain.

(iv) What do you mean by Constructor Overloading?

(v) Explain various types of access specifiers in detail.

(vi) Explain Polymorphism.

(vii) Explain exception handling mechanism in detail.

SECTION - D

(Long Answer Type Questions)

Note : Attempt **any three** questions. Each question carries **10** marks. [3×10=30]

4. (i) Explain various features of OOPs.

(ii) Explain Dynamic allocation operator in detail.

(iii) Explain various types of inheritance in detail.

(iv) Explain I/O classes in details.

(v) Explain various components of STL.

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