Reg. No. | | | | | | | | |

G. VENKATASWAMY NAIDU COLLEGE (AUTONOMOUS), KOVILPATTI – 628 502.

UG DEGREE END SEMESTER EXAMINATIONS - NOVEMBER 2024.
(For those admitted in June 2021 and later)

PROGRAMME AND BRANCH: B.Sc., INFORMATION TECHNOLOGY

SEM	CATEGORY	COMPONENT	COURSE CODE	COURSE TITLE
II	PART - III	CORE	U21IT202	PROGRAMMING WITH C++

Date & Session: 06.11.2024 / AN **Time : 3 hours** **Maximum: 75 Marks**

Course Outcome	Bloom's K-level	Q. No.	SECTION – A (10 X 1 = 10 Marks) Answer ALL Questions.
CO1	K1	1.	C++ is a. a) structured programming b) procedural programming c) object oriented programming d) both a and c
CO1	K2	2.	Which operator is used for dereferencing a pointer in C++? a) & b) * c) -> d)++
CO2	K1	3.	What is default return type of a function if not explicitly specified in C++? a) int b) float c) void d) compile time error
CO2	K2	4.	Identify the operator for accessing member variable of an object. a) . b) * c) & d) ->
CO3	K1	5.	Which is not true about a constructor in C++? a) it can have a return type b) same name as class name c) automatically called when an object is created d) can be overloaded
CO3	K2	6.	Which access specifier is used to make a member of a class visible only to the members of that class and its derived classes? a) public b) protected c) private d) static
CO4	K1	7.	Can a virtual function in C++ be declared as private in the base class? a) yes. It can be private b) No, it must be public c) No, it must be protected d) only if the derived class also declares it as private
CO4	K2	8.	Determine the value of *p when int a=10; and int *p = &a; a) address of a b) value of a c) p d) value of p
CO5	K1	9.	Can you identify the correct order of blocks in a try- catch statement? a) try, finally and catch b) try, catch and finally c) try, catch d) catch, try
CO5	K2	10.	How do you define a template class in C++? a) class T template b) template <class T> class classname c) template class <T> d) class classname<template>

Course Outcome	Bloom's K-level	Q. No.	**SECTION – B (5 X 5 = 25 Marks)** **Answer ALL Questions choosing either (a) or (b)**
CO1	K3	11a.	How does object-oriented approach differ from object-based approach. **(OR)**
CO1	K3	11b.	Explain any two user-defined data type and its declarations.
CO2	K3	12a.	Apply the working of inline function as a member function with an example. **(OR)**
CO2	K3	12b.	Mention the characteristics of friend function with an example.
CO3	K4	13a.	How would you call a parameterized constructor in two ways? **(OR)**
CO3	K4	13b.	Sketch the way of type conversion in C++.
CO4	K4	14a.	Examine the use of this pointer. **(OR)**
CO4	K4	14b.	Analyse the rules for creating virtual functions.
CO5	K5	15a.	Elaborate the working of function template with an example. **(OR)**
CO5	K5	15b.	Discuss any two stream classes with suitable examples.

Course Outcome	Bloom's K-level	Q. No.	**SECTION – C (5 X 8 = 40 Marks)** **Answer ALL Questions choosing either (a) or (b)**
CO1	K3	16a.	Illustrate any five basic concepts of object oriented programming. **(OR)**
CO1	K3	16b.	Explain any two control structures with suitable examples.
CO2	K4	17a.	Analyse the working of array of objects for handling employee data in an organization. **(OR)**
CO2	K4	17b.	Examine function overloading with an example.
CO3	K4	18a.	How will you overload binary operator with an example? **(OR)**
CO3	K4	18b.	Categorize any two kinds of inheritance with an example.
CO4	K5	19a.	Discuss the way of creating and accessing a file using ifstream and ostream. **(OR)**
CO4	K5	19b.	Build object dynamically using pointer and new operator with an example.
CO5	K5	20a.	Elaborate the working of class templates with an example. **(OR)**
CO5	K5	20b.	Discuss exception handling mechanism in C++.