PH5151

Roll No. | | | | | | | | | | |

ANNA UNIVERSITY (UNIVERSITY DEPARTMENTS)

B.E. /B.Tech / B. Arch (Full Time) - END SEMESTER EXAMINATIONS, NOV / DEC 2024

B.E.GEOINFORMATICS

4th Semester

GI5403 OBJECT ORIENTED PROGRAMMING USING C++

(Regulation2019)

Time: 3hrs Max. Marks: 100

CO1	Understand the basic concepts of Object oriented programming
CO2	Implement OOPS concept using C++ Language
CO3	Understand the concept of Inheritance and Polymorphism
CO4	Handle the I/O files
CO5	Effectively use template and exception handling

BL – Bloom's Taxonomy Levels

(L1-Remembering, L2-Understanding, L3-Applying, L4-Analysing, L5-Evaluating, L6-Creating)

PART- A(10x2=20Marks)

(Answer all Questions)

Q.No	Questions	Marks	CO	BL
1	List the features of object-oriented GIS.	2	1	1
2	Describe the concept of object identity.	2	1	2
3	Describe operator overloading with an example.	2	2	1
4	Differentiate between function overloading and operator overloading.	2	2	2
5	What is the significance of constructors in C++?	2	3	1
6	Differentiate between single inheritance and multiple inheritance.	2	3	2
7	List the components of the Standard Template Library (STL).	2	4	1
8	Describe the process of object serialization.	2	4	2
9	Describe the try-catch-throw paradigm with an example.	2	5	1
10	Differentiate between rethrowing an exception and catching an exception.	2	5	2

PART- B(5x 13=65Marks)

(Restrict to a maximum of 2 subdivisions)

Q.No	Questions	Marks	CO	BL
11 (a)	Examine the principles of Object-Oriented Programming and explain their significance in object-oriented modeling with relevant examples.	13	1	3
	OR			
11 (b)	Examine the role of object-oriented modeling in designing complex systems and discuss its applications in GIS and databases.	13	1	3
12 (a)	Examine the structure and features of C++ programming, focusing on keywords, data types, and operator overloading, with relevant examples	13	2	3
	OR			
12 (b)	Determine the impact of function overloading and call-by-reference mechanisms in improving the flexibility and efficiency of C++ programs.	13	2	3