LT 71

Reg.No.:								

VIVEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN
[AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY, CHENNAI]
Elayampalayam – 637 205, Tiruchengode, Namakkal Dt., Tamil Nadu.

Question Paper Code: 6025

B.E. / B.Tech. DEGREE END-SEMESTER EXAMINATIONS – AUG. / SEP. 2023
Second Semester
Information Technology
U19IT201– OBJECT ORIENTED PROGRAMMING
(Regulation 2019)

Time: Three Hours Maximum: 100 Marks

Answer ALL the questions

Knowledge Levels (KL)	K1 – Remembering	K3 – Applying	K5 - Evaluating
	K2 – Understanding	K4 – Analyzing	K6 - Creating

PART – A

(10 x 2 = 20 Marks)

Q.No.	Questions	Marks	KL	CO
1.	Define Message Passing.	2	K1	CO1
2.	What is Static class?	2	K1	CO1
3.	List the ways in which a constructor can be called.	2	K2	CO2
4.	What are the types of type conversions?	2	K1	CO2
5.	What is template?	2	K1	CO3
6.	Differentiate inline function with macro.	2	K2	CO3
7.	Give two real life examples for multilevel inheritance.	2	K4	CO4
8.	What is virtual function?	2	K1	CO4
9.	List the features of Java programming.	2	K2	CO5
10.	What is an exception?	2	K1	CO5

PART – B

(5 x 13 = 65 Marks)

Q.No.		Questions	Marks	KL	CO
11.	a)	Write a C++ program to prepare student mark list for three subjects. Display name, rollno, marks, avg and total. Use classes and objects.	13	K3	CO1

(OR)

	b)	Describe in detail about the objected oriented features supported by C++.	13	K1	CO1
12.	a)	Write C++ program to add two vectors using operator overloading (+ operator may be used).	13	K3	CO2
		(OR)			
	b)	Explain the various types of constructors that are available in C++ with suitable example.	13	K1	CO2
13.	a)	Write a C++ program to accept integer or string values from the user within a specified range. If the input violates the range, appropriate exception needs to be raised.	13	K3	CO3
		(OR)			
	b)	What is a function template? Write a template function to sort arrays of float and int using bubble sort.	13	K1 K3	CO3
14.	a)	Explain inheritance in C++ with suitable example.	13	K1	CO4
		(OR)			
	b)	Explain how error Handling is done in File I/O with suitable examples.	13	K1	CO4
15.	a)	Discuss the various types of operators in Java. Explain with suitable examples.	13	K1	CO5
		(OR)			
	b)	Develop a Java program to find the smallest number in the given array by creating one dimensional array and two dimensional array using new operator.	13	K3	CO5

PART – C

(1 x 15 = 15Marks)

Q.No.		Questions	Marks	KL	CO
16.	a)	Develop a class polynomial using C++ whose internal representation is a term consisting of coefficient and an exponent. Develop a complete class containing proper constructor and destructor functions as well as set and get functions. Overload the additions and subtraction operator to add and subtract two polynomials and display the results. Overload the assignment operator to assign one polynomial to another using friend function.	15	K6	CO2 CO3
		(OR)			
	b)	Write a C++ program to implement a binary search to find whether the given element is present in the array or not using objects and classes.	15	K3	CO1