

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086
(For candidates admitted from the academic year 2023 – 2024)

M.Sc. DEGREE EXAMINATION, APRIL 2024
INFORMATION TECHNOLOGY
SECOND SEMESTER

COURSE : MAJOR CORE
PAPER: OBJECT ORIENTED PROGRAMMING : CONCEPTS AND PRACTICE
SUBJECT CODE : 23CS/PC/OO24
TIME : 1 ½ HOURS **MAX. MARKS: 50**

Q. No.	SECTION A Answer all the questions (6 X 5 = 30)	CO	KL
1.	a) Enumerate the fundamental difference between procedural and Object Oriented programming paradigms. (OR) b) What is the purpose of data hiding in Object Oriented programming?	CO1	K1
2.	a) Illustrate with an example how do environmental constraints influence interface design? (OR) b) Summarize on identifying the implementation with respect to interface design.	CO2	K2
3.	a) Why is it important to hide the implementation details of a class and how can it be achieved? (OR) b) Explain the error handling mechanisms in class design.	CO3	K3
4.	a) Explain the purpose of operator overloading in object-oriented concepts. (OR) b) How does class design is involved in modeling real-world systems?	CO3	K3
5.	a) Explicate the key steps involved in designing objects. (OR) b) Examine the role of encapsulation in object-oriented design.	CO4	K4
6.	a) Analyze how interfaces and abstract classes contribute to designing reusable components. (OR) b) Explicate the significance of packages in software development.	CO4	K4
Q. No.	SECTION B Answer all the questions (2 x 10=20)	CO	KL
7.	a) Identify how classes and objects are related in object-oriented programming with an example. (OR) b) Apply the concept of providing the user with the minimal interface possible and its impact on usability.	CO3	K3
8.	a) Explicate the significance of designing robust constructors in class design. (OR) b) Analyze the concept of contracts in the context of frameworks and reusable components.	CO4	K4