

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

M.Sc. DEGREE EXAMINATION – APRIL 2026
INFORMATION TECHNOLOGY

SECOND SEMESTER

COURSE : 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) List any five differences between procedural and Object-Oriented Programming. (OR) b) Give a real-world example of Interface/Implementation paradigm.	CO1	K1
2.	a) Explain abstract thinking when designing interfaces. (OR) b) Explain error handling in object-oriented programming.	CO2	K2
3.	a) Apply the concept of minimum public interface in designing a “Library” class. (OR) b) Design a simple class applying all class design guidelines together.	CO3	K3
4.	a) Make use of “Is-a” and “Has-a” relationships in examples. (OR) b) Identify and explain how classes collaborate in object-oriented systems.	CO3	K3
5.	a) Compare abstract classes and interfaces with design implications. (OR) b) Examine a generic interface for a Repository system.	CO4	K4
6.	a) Examine a simple Statement of Work (SOW) for a Library Management System. (OR) b) Analyse the Environmental Constraints in object design.	CO4	K4
Q. No.	SECTION B Answer all the questions (2 x 10=20)	CO	KL
7.	a) Apply constructors and operator overloading in a suitable example and explain. (OR) b) Identify and explain how real-world systems are modeled in Object-Oriented Design. Discuss key principles involved.	CO3	K3
8.	a) Analyse the complete process of designing with objects using UML. (OR) b) Analyse the concept of a contract in object-oriented systems and its importance.	CO4	K4
