

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086
(For candidates admitted from the academic year 2024 – 2025 and thereafter)

M.Sc. DEGREE EXAMINATION – APRIL 2026
DATA SCIENCE
SECOND SEMESTER

COURSE : MAJOR CORE
PAPER : DATABASES FOR DATA SCIENCE
SUBJECT CODE : 24DS/PC/DD24
TIME : 1 ½ HOURS **MAX. MARKS: 50**

Q. No.	SECTION A Answer all the questions	(6 X 5 = 30)	CO	KL
1.	a) Define the four types of NoSQL Databases. (OR) b) Describe Column-Family Stores.		CO1	K1
2.	a) Explain Document oriented Database Features. (OR) b) Explain sharding in distribution models.		CO2	K2
3.	a) Make use of the Architecture and Categorization of DBMS in an example and explain. (OR) b) Utilise Tactical/Strategic Decision-Making in an example and explain.		CO3	K3
4.	a) Apply Relational and Graph Modeling in an example. (OR) b) Apply graph database in a use case and explain.		CO3	K3
5.	a) Analyse the use of aggregate functions in SQL. (OR) b) Differentiate data warehouses and data lakes.		CO4	K4
6.	a) Explain attacks of clusters. (OR) b) Explain the use cases of NoSQL stores.		CO4	K4
Q. No.	SECTION B Answer all the questions	(2 x 10=20)	CO	KL
7.	a) Apply file based approach and database based approach to data management and explain. (OR) b) Apply an Entity Relationship diagram for supplier and product relationships and explain.		CO3	K3
8.	a) Analyse first and second normal forms using an example (OR) b) Analyse the process of Extraction, Transformation, and Loading in data warehousing.		CO4	K4
