

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

M. Sc. DEGREE EXAMINATION, NOVEMBER 2023
BIOINFORMATICS
FIRST SEMESTER

COURSE : CORE
PAPER : DATABASE MANAGEMENT SYSTEMS
SUBJECT CODE : 23BI/PC/DB14
TIME : 1 ½ HOURS

MAX. MARKS: 50

Q. No.	SECTION A	CO	KL
	All questions to be answered (10 x 1=10 marks)		
1	Explain the different types of file organization?	CO1	K1
2	Write short notes on Nano and Vim Editor	CO1	K1
3	Define BCNF rules	CO1	K1
4	Write the difference between B-tree and B+ tree	CO1	K1
5	What is the difference between SQL and MySQL?	CO1	K1
6	List out the difference between CHAR and VARCHAR2 datatype in SQL	CO2	K2
7	Explain about the importance of candidate keys	CO2	K2
8	Explain about retrieving protein sequences through mongodb	CO2	K2
9	Summarize about the JSON file format	CO2	K2
10	How to run MongoDB shell command?	CO2	K2
Q. No.	SECTION B	CO	KL
	Answer any TEN questions (10 x 2= 20 marks)		
11	Demonstrate the types of kernel in the Linux	CO3	K3
12	Illustrate the importance of secondary storage devices with example	CO3	K3
13	Discover the different types of indexes and its role in DBMS	CO3	K3
14	Demonstrate the database schemas and its importance	CO3	K3
15	Explain about the Revoke Privilege Command.	CO3	K3

16	Manipulate the common types of join in SQL	CO3	K3
17	Analyse the nature of multimedia database. Write the benefits of multimedia database	CO4	K4
18	Distinguish the advantages of RDBMs over DBMs.	CO4	K4
19	Explain about the establishing relations between tables	CO4	K4
20	Discriminate the advantages of No SQL over RDBMS	CO4	K4
21	Explain the store a DNA sequence using MongoDB	CO4	K4
22	How to create Uniprot in MongoDB.	CO4	K4
Q. No.	SECTION C Answer FOUR questions with internal choice (4 x 5= 20 marks)	CO	KL
23	a) Assess the some important basics commands used in Linux (OR) b) Summarize the Data models, layers and types in Database Management Systems	CO5	K5
24	a) Evaluate the Database Normalisation and denormalization in Relational Databases (OR) b) Compare the different types of Database Management Systems	CO5	K5
25	a) Design the keys for linking relational databases (OR) b) Write briefly about DBMS organization with suitable example	CO5	K6
26	a) Compose the features of No SQL and write brief history of No SQL databases (OR) b) Formulate the different types file formats used in Database	CO5	K6
