

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI - 600 086
(For candidates admitted during the academic year 2023 – 2024 & thereafter)

M.Sc. DEGREE EXAMINATION – APRIL 2026
INFORMATION TECHNOLOGY
FOURTH SEMESTER

COURSE : CORE
PAPER : CLOUD COMPUTING : THEORY AND PRACTICE
SUBJECT CODE : 23CS/PC/CT45
TIME : 1 ½ HOURS **MAX. MARKS: 50**

Q. No.	SECTION A (6 X 5 = 30) Answer all the questions	CO	KL
1.	a) What are the principles of cloud computing? (OR) b) List the cloud vulnerabilities and explain how they impact cloud applications.	CO1	K1
2.	a) Outline the relationship between SOA and cloud computing. (OR) b) Demonstrate the MapReduce programming model and interpret the role of ZooKeeper.	CO2	K2
3.	a) Identify and explain the types of virtualizations. (OR) b) Identify the core points related to multicore technology and parallelism and explain.	CO3	K3
4.	a) Identify the working mechanism of Amazon EC2. (OR) b) Experiment with Google web services with focus on Google App Engine.	CO3	K3
5.	a) Analyse the significance of transaction processing and NoSQL databases. (OR) b) Distinguish the types of SLA and its life cycle.	CO4	K4
6.	a) Analyse the significance of security in the cloud. (OR) b) Examine about migrating applications to the cloud.	CO4	K4
Q. No.	SECTION B (2 x 10=20) Answer all the questions	CO	KL
7.	a) Explain the anatomy of the cloud in detail. (OR) b) Develop a cloud-based application architecture by using suitable architectural styles.	CO3	K3
8.	a) Classify and analyze the different types of load balancing algorithms. (OR) b) Examine the features of Amazon RDS.	CO4	K4
