Code No.: CY723OE   R20   H.T.No. | | 8 | R | | | | |

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
IV–B.TECH–I–Semester End Examinations (Supply) - Apri- 2024
INTRODUCTION TO CLOUD COMPUTING
(CSM)

[Time: 3 Hours]   [Max. Marks: 70]

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 20 marks. Answer all questions in Part A.
Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART-A   (20 Marks)

1. a)	What are the current research trends in optical computing?	[2M]
b)	How does grid computing differ from cluster computing?	[2M]
c)	What is the motivation for cloud computing?	[2M]
d)	Explain the concept of cloud computing as a service.	[2M]
e)	What is cloud architecture?	[2M]
f)	Explain the anatomy of the cloud.	[2M]
g)	Why IaaS is a suitable choice for businesses?	[2M]
h)	Define PaaS.	[2M]
i)	What is Salesforce's Sales Cloud focused on?	[2M]
j)	Describe the Captiva Cloud Toolkit and its purpose.	[2M]

PART-B   (50 Marks)

2.a)	How does high-performance computing achieve faster processing speeds?	[5M]
b)	Develop a security strategy for a mobile application.	[5M]

OR

3.a)	Evaluate fault-tolerance mechanisms in cluster computing.	[5M]
b)	What are the key components of a distributed computing system?	[5M]

4.a)	Describe the five essential characteristics of cloud computing.	[5M]
b)	Explain the needs for cloud computing.	[5M]

OR

5.a)	Compare cloud deployment models and their use cases.	[5M]
b)	What motivates businesses to adopt cloud computing?	[5M]

6.a)	Describe the importance of network connectivity in ensuring the availability of cloud resources.	[5M]
b)	Design architecture for a scalable cloud-based e-commerce platform.	[5M]

OR

7.a)	Differentiate between the various layers in cloud architecture, and how do they interact?	[5M]
b)	Analyze the key components of cloud architecture.	[5M]

8.a)	How does IaaS differ from traditional infrastructure provisioning?	[5M]
b)	Design a cloud infrastructure using IaaS for a scalable web application.	[5M]

OR

9.a)	Define SaaS and its primary features.	[5M]
b)	Compare the strengths and weaknesses of various SaaS providers.	[5M]

10.a) What are the core components of Google Cloud Platform? [5M]

b) Create a knowledge management system using Salesforce's Knowledge as a Service. [5M]

OR

11.a) Explain the concept of cloud storage and its benefits. [5M]

b) Evaluate the environmental impact of Amazon EC2 data centers. [5M]

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