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

B. C. A. DEGREE EXAMINATION APRIL 2026
SIXTH SEMESTER

COURSE : MAJOR CORE
PAPER : CLOUD COMPUTING
SUBJECT CODE : 23CS/MC/CC65
TIME : 3 HOURS **MAX. MARKS: 100**

Q. No.	SECTION A **Answer all questions. (20 x 1 = 20)**	CO	KL
1(i)	A cloud deployed exclusively for a single organization is called _____ cloud. a) public b) community c) private d) hybrid	CO1	K1
(ii)	A cloud broker primarily performs _____ function. a) provides physical infrastructure b) manages data centers c) intermediates between provider and consumer d) owns broadband network	CO1	K1
(iii)	A logical network perimeter is used to _____. a) physically isolate servers b) define virtual security boundaries c) increase CPU speed d) compress data	CO1	K1
(iv)	Resource replication in cloud computing improves _____. a) cost b) latency c) fault tolerance d) manual control	CO1	K1
(v)	Web services typically communicate using the _____ protocol over the Internet. a) FTP b) SMTP c) HTTP d) SNMP	CO1	K1
vi)	The mechanism responsible for distributing incoming requests across multiple servers is _____ a) SLA monitor b) load balancer c) audit monitor d) hypervisor	CO1	K1
vii)	The primary function of a SLA monitor is to _____. a) encrypt stored data b) track the service performance c) monitor billing usage d) store system logs	CO1	K1
viii)	_____ switches a failover system to a standby resource. a) Dynamic scaling b) Resource pooling c) Active–passive configuration d) Thin provisioning	CO1	K1
ix)	The CPU pools in resource pooling architecture are used to _____. a) store LUNs b) allocate processing cores c) manage SLAs d) monitor security	CO1	K1
x)	In the cloud provider perspective, focus is mainly on _____. a) service delivery b) end-user device configuration c) personal productivity tools d) consumer internet usage	CO1	K1

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Q. No.	Fill in the blanks	CO	KL
2(i)	_____ scaling is a common within cloud environments which comprises of commodity hardware.	CO2	K2
(ii)	_____ is the automated ability of a cloud to transparently scale IT resources to runtime conditions.	CO2	K2
(iii)	A _____ is a specialized IT infrastructure that houses centralized IT resources such as servers and databases.	CO2	K2
(iv)	_____ is the characteristic of not having been altered by an unauthorized party.	CO2	K2
(v)	_____attack is to overload IT resources to the point where they cannot function properly.	CO2	K2
(vi)	The _____ database stores session or application state information.	CO2	K2
(vii)	Thin provisioning technology is used in _____ virtualization disk provisioning architecture.	CO2	K2
(viii)	The _____ monitor tracks whether recovery compliance with legal or policy requirements.	CO2	K2
(ix)	_____ architecture ensures data availability by storing copies of data in multiple locations.	CO2	K2
(x)	A common service quality metric defined in SLAs is system _____ percentage.	CO2	K2
Q. No.	**SECTION B** **Answer all the questions (4 x 5 = 20)**	**CO**	**KL**
3	a) Make use of cloud computing concepts to explain its goals and benefits.	CO3	K3
	(OR) b) Apply router-based interconnectivity in broadband networks and Internet architecture to enable cloud services.	CO3	K3
4	a) Make use of suitable example to define hypervisor and its mechanism.	CO3	K3
	(OR) b) Make use of diagram to explain ready-made environment in cloud computing.	CO3	K3
5	a) Analyse the automated scaling listener mechanism in cloud computing.	CO4	K4
	(OR) b) Analyse the cloud storage devices and its interfaces.	CO4	K4

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6	a) Examine the cloud bursting architecture with its supporting mechanisms.	CO4	K4
	(OR)		
	b) Examine the dynamic scalability architecture and its scaling types.	CO4	K4
Q. No.	**SECTION C** **Answer all the questions (5 x 12 = 60)**	**CO**	**KL**
7	a) List and explain the six specific characteristics of cloud computing in detail.	CO1	K1
	(OR)		
	b) Recall cloud security threats with suitable diagrams.	CO1	K1
8	a) Explain virtualization technology and its types with suitable diagrams.	CO2	K2
	(OR)		
	b) Explain multitenant technology in cloud computing.	CO2	K2
9	a) Make use of examples to explain cloud service delivery models.	CO3	K3
	(OR)		
	b) Make use of suitable diagrams to explain cloud usage monitor.	CO3	K3
10	a) Analyse the service load balancer with diagram.	CO4	K4
	(OR)		
	b) Analyse remote administration system and its portals.	CO4	K4
11	a) Evaluate the resource pooling architecture and its impact on resource utilization.	CO5	K5
	(OR)		
	b) Evaluate SLA guidelines for best practices and recommendations in cloud computing.	CO5	K5

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