		Marks	BL	CO	PO
b.i.	Write short notes on enabling technologies of cloud computing.	5	1	3	2
ii.	Compare the benefits and challenges of cloud computing, cloud applications and application availability.	5	1	2	1
27. a.	Discuss in detail about implementation levels of virtualization.	10	2	4	1

(OR)

		Marks	BL	CO	PO
b.i.	Write short notes on virtualization support and disaster recovery.	5	2	3	3
ii.	Discuss in detail about server virtualization with an example of Intel server.	5	2	3	5
28. a.	Explain in detail about hybrid storage networking technologies.	10	3	4	1

(OR)

		Marks	BL	CO	PO
b.	Write down the various steps and design consideration of cloud applications technologies and the process required when deploying web services.	10	2	4	2
29. a.i.	Write short notes on resource provisioning methods.	5	1	3	1
ii.	How do you choose economically a cloud platform for an organization? Justify.	5	2	2	2

(OR)

		Marks	BL	CO	PO
b.	Explain in detail about NIST-cloud computing architecture.	10	3	3	3
30. a.i.	Define and list out the cloud architecture patterns.	5	2	4	2
ii.	State the challenges of auto scaling pattern.	5	2	5	1

(OR)

		Marks	BL	CO	PO
b.	Compare and contrast in detail node failure pattern with multisite deployment pattern.	10	2	4	5

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B.Tech. DEGREE EXAMINATION, MAY 2022
Sixth Semester

18CSE344T – CLOUD ARCHITECTURE
(For the candidates admitted from the academic year 2018-2019 to 2019-2020)

Note:
(i)   **Part - A** should be answered in OMR sheet within first 40 minutes and OMR sheet should be handed over to hall invigilator at the end of 40th minute.
(ii) **Part - B** should be answered in answer booklet.

Time: 2½ Hours   Max. Marks: 75

PART – A (25 × 1 = 25 Marks)
Answer **ALL** Questions

	Marks	BL	CO	PO
1. The term "cloud" in cloud computing is referred as	1	1	1	1

  (A) Wireless   (B) Hard drives
  (C) People   (D) Internet

	Marks	BL	CO	PO
2. In below mentioned companies which does not a support for cloud computing?	1	1	1	1

  (A) Google   (B) Amazon
  (C) Black board   (D) Microsoft

	Marks	BL	CO	PO
3. To combine many networks or parts of networks in to a virtual unit is known as	1	1	1	1

  (A) Internal network virtualization   (B) External network virtualization
  (C) Storage virtualization   (D) Desktop virtualization

	Marks	BL	CO	PO
4. In below mentioned cloud characteristic refers to the ability of users to scalab its service as needed without having to contact a human representative of the cloud service provider	1	1	1	1

  (A) Resource pooling   (B) Rapid elasticity
  (C) On-demand self service   (D) Broad network access

	Marks	BL	CO	PO
5. REST is a software architecture style is used for _____.	1	1	1	1

  (A) Distributed systems   (B) Centralized systems
  (C) Parallel computing   (D) Soft computing

	Marks	BL	CO	PO
6. The term message filtering is referred as	1	1	2	2

  (A) Content-based message selection   (B) Controller
  (C) Publish   (D) Message bus

	Marks	BL	CO	PO
7. Which of the following virtualization abstraction levels having WINE and rCUDA software packages?	1	2	2	2

  (A) Hardware Abstraction Layer (HAL) level   (B) Operating system level
  (C) Library (user-level API) level   (D) Application level

8. The virtualization layer is responsible for converting portions of the _____ into virtual hardware. `1  2  2  1`
   (A) Real firmware   (B) Real operating system
   (C) Real software   (D) Real hardware

9. _____ software gives enterprises security professionals both insight into and a track record of the activities within their IT environment. `1  2  2  3`
   (A) Security Information Management (SIM)
   (B) Security Event Management (SEM)
   (C) Security Information and Event Management (SIEM)
   (D) Security Audit Management (SAM)

10. _____ module evaluates how different storage infrastructure components are performed efficiently to identity bottlenecks. `1  2  2  3`
    (A) Security monitoring   (B) Performance monitoring
    (C) Availability monitoring   (D) Accessibility monitoring

11. Cloud server can able to trace actions of an entity uniquely to that entity using _____ technique. `1  2  2  3`
    (A) Accountability   (B) Database management
    (C) Access policy   (D) Log file

12. The process in which if one party cannot deny receiving a message or a transaction nor the other party deny sending a message or a transaction is known as _____. `1  2  3  1`
    (A) Authentication   (B) Authorization
    (C) Authenticity   (D) Non-repudiation

13. Which redundancy model is suitable for backup site whenever booting is necessary? `1  2  3  2`
    (A) Active / cold standby   (B) Active / hot standby
    (C) Active / active standby   (D) Cold / active standby

14. _____ is a party that can perform an independent examination of cloud service controls with the intent to express an opinion theorem. `1  2  3  2`
    (A) Cloud server   (B) Cloud user
    (C) Cloud auditor   (D) Hypervisor

15. Which resource provisioning model, adds / removes computing virtual instances based on the current utilization level of the allocated resources? `1  2  3  5`
    (A) Demand-driven method   (B) Event-driven method
    (C) Popularity-driven method   (D) Integrated-driven method

16. In cloud server, hacker exploits vulnerabilities of a web application and embed malicious code into changing the course of normal execution is known as _____. `1  2  3  5`
    (A) Malware injection attack   (B) Wrapping attack
    (C) Man-in-middle attack   (D) Denial of service attack

17. Point out the correct statement. `1  2  4  5`
    (A) Map reduce tries to place the data and the computation as close as possible
    (B) Map task in map reduce is performed using the mapper ( ) function
    (C) Reduce task in map reduce is performed using the map ( ) function
    (D) Increase task in map reduce is performed using the map ( ) function

18. The method followed in case of node failure, where the node gets disabled is _____. `1  2  1  1`
    (A) STONITH   (B) Fibre channel
    (C) Fencing   (D) Token ring

19. _____ is a horizontal scaling strategy in which resources from each node is added to the existing stack. `1  2  3  2`
    (A) Sharding   (B) Resources
    (C) Map reduce   (D) Database

20. In cloud computing, node failure scenario mechanism of sudden failure + restart is initiated by `1  3  2  1`
    (A) Sudden hardware failure   (B) Cloud platform
    (C) Application update   (D) Application managed reboot

21. Mirroring data asynchrony to a remote size, is an example of `1  2  2  3`
    (A) RPO in the order of minutes   (B) Near zero RPO
    (C) RPO of 1 hour   (D) RPO of 24 hours

22. Which of the following storage methods used for storage virtualization? `1  3  2  3`
    (A) File-based and byte stream based   (B) File-based and block based
    (C) Record-based and block based   (D) File-based and bit stream based

23. A NAS architecture is suitable for _____ type of real time applications. `1  2  3  2`
    (A) Secured access   (B) Shared access
    (C) Remote access   (D) Parallel access

24. Efficient cloud computing centers can be created using _____ techniques. `1  2  2  3`
    (A) Transubstantiation   (B) Virtualization
    (C) Cannibalization   (D) Insubordination

25. Applications and services that run on a decentralized network using hypervisor is called as _____. `1  1  2  4`
    (A) Cloud   (B) Grid
    (C) Parallel   (D) Soft computing

PART – B (5 × 10 = 50 Marks)
Answer ALL Questions

Marks BL CO PO

26. a. Briefly discuss in detail about cloud services with suitable examples. `10  2  2  3`

(OR)