Reg. No. : .....

Code No.: 10535 E Sub. Code: CMCA 61

B.C.A. (CBCS) DEGREE EXAMINATION, APRIL 2024.

Sixth Semester

Computer Application - Core

CLOUD COMPUTING

(For those who joined in July 2021-2022 only)

Time: Three hours Maximum: 75 marks

PART A  $\leftarrow$  (10 × 1 = 10 marks)

Answer ALL the questions.

Choose the correct answer.

- 1. Which of the following is not a characteristic of cloud computing?
  - (a) On-demand self-service
  - (b) Network access
  - (c) Limited scalability
  - (d) Resource pooling

- 2. What is the term for combining on-premises infrastructure with cloud resources?
  - (a) Distributed Cloud
  - (b) Multi-Cloud
  - (c) Hybrid Cloud
  - (d) Managed Cloud
- 3. What does the term "cloud computing architecture' refer to?
  - (a) The physical infrastructure of data centers
  - b) The design and layout of virtualized resources and components
  - (c) The programming languages used in cloud applications
  - (d) The security protocols implemented in cloud environments
- 4. Which layer of cloud architecture is responsible for managing user interfaces and interactions?
  - (a) Application layer
  - (b) Presentation layer
  - (c) Data layer
  - (d) Infrastructure layer

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- 5. Which cloud computing component is responsible for creating and managing virtual instances of servers?
  - (a) Hypervisor
  - (b) Load balancer
  - (c) Virtual machine
  - (d) Virtual private network
- 6. Which virtualization technique allows multiple virtual machines to run on a single physical server?
  - (a) Full virtualization
  - (b) Para-virtualization
  - (c) Hardware-assisted virtualization
  - (d) Containerization
- 7. What is the purpose of redundancy in cloud storage?
  - (a) To reduce storage costs
  - (b) To increase data security
  - (c) To decrease accessibility
  - (d) To improve data retrieval speed

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- 8. What does S3 stand for in Amazon S3?
  - (a) Simple Storage Service.
  - (b) Secure Storage Service
  - (c) Structured Storage Service
  - (d) Storage Sharing Service
- 9. Identify a popular example of a SaaS application:s
  - (a) Microsoft Windows
  - (b) Google Does
  - (c) Apple Mac OS
  - (d) Local video editing software
- 10. Which service model provides a platform for developers to build and deploy applications?
  - (a) IaaS
  - (b) PaaS
  - (c) SaaS
  - (d) CaaS (Container as a service)

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[P.T.O.]

PART B —  $(5 \times 5 = 25 \text{ marks})$ 

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) State the pros and cons of cloud computing.

Or

- (b) Classify and explain the different types of clouds.
- 12. (a) Write short notes on cloud life cycle model.

Or

- (b) Summarize the concepts of cloud governance.
- 13. (a) Enumerated the advantages of virtualization.

Or

- (b) Narrate the anatomy of cloud infrastructure.
- 14. (a) Comment on provisioning cloud storage.

Or

(b) Write detailed notes on data security in cloud.

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- 15. (a) Explain the following
  - (i) SaaS
  - (ii) PaaS

Or

(b) Give a comment on Eucalyptus.

PART C —  $(5 \times 8 = 40 \text{ marks})$ 

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Illustrate the history and characteristics of cloud computing.

Or

- (b) Discuss the cloud service and deployment models in detail.
- 17. (a) Narrate the model for federated cloud computing.

Or

(b) Draw and Explain the cloud system architecture in detail with a suitable diagram.

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Describe the role of hypervisor in 18. (a) virtualization. Also briefly explain the different types of hypervisors with a neat diagram.

Or

- Write in detail about the Virtualization of CPU with suitable diagram.
- Describe in detail about the cloud Storage 19. (a) with example.

Or

- Illustrate the types of risks in cloud computing.
- Explain in detail about VMWare. 20.

Or

Describe the architecture of Windows Azure.

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