

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BCA DEGREE EXAMINATION DECEMBER 2022
(Fifth Semester)

Branch – COMPUTER APPLICATIONS

CLOUD APPLICATIONS AND DEVELOPMENT

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10 x 1 = 10)

1. Cloud computing is a kind of abstraction which is based on the notion of combining physical resources and represents them as _____resources to users.
(i) Real (ii) Cloud
(iii) Virtual (iv) None of the mentioned
2. Which of the following are correct technologies working behind the cloud computing platforms?
(i) Virtualization (ii) SOA
(iii) Grid Computing (iv) All of the above
3. Which of the following system does not provision storage to most users?
(i) PaaS (ii) IaaS (iii) CaaS (iv) SaaS
4. Which cloud allows systems and services to be accessible within an organization?
(i) Public cloud (ii) Private cloud
(iii) Community cloud (iv) Hybrid cloud
5. _____ is the Cloud storage service from Google.
(i) GCS (ii) CGS
(iii) BLOB (iv) Amazon RDS
6. Which of the following is the deployment model?
(i) Public (ii) Private
(iii) Hybrid (iv) All of the mentioned
7. _____ serves as a PaaS provider in the Google App Engine system.
(i) Google (ii) Amazon (iii) Microsoft (iv) Dell
8. _____ is an application design methodology that provides a flexible way of creating cloud applications in a rapid, convenient and platform independent manner.
(i) Cloud Component Model (ii) Cloud Component Machine
(iii) Cloud Component Module (iv) Cloud Computer Machine
9. _____ traces of applications are sampled and replayed to generate the synthetic Workloads.
(i) Analytical approach (ii) Empirical approach
(iii) User Emulation (iv) Aggregate Workload Generation
10. Which of the following Cloud Security Characteristic states that data not having been altered by an unauthorized party ?
(i) Integrity (ii) Confidentiality
(iii) Authenticity (iv) Availability

Cont...

SECTION - B (25 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 5 = 25)

- 11 a) Sketch the characteristics of Cloud Computing.
OR
b) Explain the following:
i) Deployment Design
ii) Replication
- 12 a) Explain about the Cloud Storage Services.
OR
b) Outline about Open Source Private Cloud Software.
- 13 a) Analyze the design consideration for Cloud Applications.
OR
b) Summarize about Relational Databases.
- 14 a) Explain the various Streaming Protocols.
OR
b) Describe about Deployment Prototyping.
- 15 a) Explain about Authentication in Cloud Security.
OR
b) Summarise about use of Cloud Computing in Education.

SECTION -C (40 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 8 = 40)

- 16 a) Discuss in detail about various Cloud Service Models with example.
OR
b) Elucidate the following
i) Types of Virtualization
ii) Load Balancing
- 17 a) Highlight the features of Database Services.
OR
b) Elucidate the following:
i) Deployment and Management Services
ii) Identity and Management Services
- 18 a) Discuss in detail about Reference Architecture for Cloud Applications.
OR
b) Discuss the Cloud Component Model Application Design Methodology.
- 19 a) Summarise about Live Video Streaming App.
OR
b) Discuss the design considerations for a Benchmarking Methodology.
- 20 a) Enumerate about Cloud Security Architecture and its Challenges.
OR
b) Examine how cloud computing is used in manufacturing industry.