

TILAK MAHARASHTRA VIDYAPEETH, PUNE
BACHELOR OF COMPUTER APPLICATIONS (B.C.A.)(044)/
SPECIALIZATION IN CYBER SECURITY (CS)(464)

EXAMINATION: MAY - 2026

SEMESTER- VI

**Sub: Cloud Technology/Virtualization and Cloud Technology
(BCA-640-20/BCA23-603/BCA-CS-640-20/BCAC23-603)**

Date : 26/05/2026

Total Marks : 60

Time: 10.00 am to 12.30 pm

Instructions:

1. All questions are compulsory unless and otherwise stated.
2. Bold figures to the right of every question are the maximum marks for that question.
3. Candidates are advised to attempt questions in order.
4. Answers written illegibly are likely to be marked zero.
5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
6. Draw neat and labelled diagrams wherever necessary.

Q.1. Fill in the blanks.

(05)

1. Cloud computing is often described using the term "on-demand _____-service."
a) auto
b) self
c) manual
d) managed
2. Microsoft's cloud service platform is known as _____.
a) Oracle
b) AWS
c) Azure
d) Redshift
3. Private cloud is owned and _____ by a single organization.
a) operated
b) copied
c) leased
d) blocked
4. A virtual machine is a virtual version of a _____ machine.
a) logical
b) private
c) local
d) physical
5. Cloud services are generally billed on a _____ basis.
a) one-time
b) subscription
c) hardware
d) license

Q.2. True or False.

(05)

1. Virtual machines share the hardware of the host system.
2. Cloud computing is scalable and elastic.
3. All virtualization requires hardware support.
4. Public clouds are hosted in the user's local environment.
5. Redundancy in the cloud improves data availability.

Q.3. Answer the following. (Solve any 5) (10)

1. What is utility computing?
2. Define Hybrid cloud.
3. Define HTTP and IP address.
4. Define SAAS.
5. Define Para virtualization.
6. Define RAID.
7. Define FTP and SMTP.

Q. 4. Answer the following in detail. (Solve any 6) (30)

1. Explain snapshot and its use in virtualization.
2. What are the risks of cloud computing?
3. Explain cloud computing? Describe its essential characteristics.
4. How does cloud computing support disaster recovery?
5. Explain resource allocation in virtualization.
6. Differentiate between Type 1 and Type 2 hypervisors with examples.
7. What are the risks or challenges of virtualization?

Q. 5. Answer the following in detail. (Solve any 1) (10)

1. Describe virtualization. Explain its types in detail.
 2. Explain cloud computing and its service models. Discuss the advantages and disadvantages of cloud computing.
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