

Cloud Computing Unit-3 PYQ Analysis (Based on Your Uploaded Papers: May 2022, May 2023, May 2024, Dec 2024, June 2025)

UNIT-3 QUESTIONS FOUND IN PYQs

June 2025

Q3(a)

Discuss the importance of data storage solutions like BigTable and HBase in cloud computing.

➔ Topic:

- BigTable
- HBase

 Very Important

Q3(b)

How does enterprise batch processing benefit from the MapReduce model?

➔ Topic:

- Enterprise Batch Processing
- MapReduce

★ Very Important

 **December 2024**

Q4(a)(i)

Compare GFS and HDFS.

➔ Topic:

- GFS
- HDFS

★★★★★ Repeated

Q4(a)(ii)

Differentiate data store and simple database.

➔ Topic:

- Cloud Data Store

★★★ Medium

Q4(b)

Why is BigTable known as distributed storage system?

➔ Topic:

- BigTable

★★★★★ Repeated

Q5(a)

How does MapReduce work? Explain shuffling in MapReduce.

➔ Topic:

- MapReduce Working

- Shuffling

★★★★★ Repeated

 **May 2024**

Q3(a)

What is BigTable? Describe architecture of Google File System.

➔ Topic:

- BigTable
- GFS Architecture

★★★★★ Repeated

Q3(b)

What is MapReduce? How does MapReduce model differ from other models?

➔ Topic:

- MapReduce

- MapReduce Comparison

★★★★★ Repeated

Q7(a)

Describe relational database. Compare GFS and HDFS.

➡ Topic:

- Relational Database
- GFS vs HDFS

★★★★★ Repeated

 **May 2023**

Q4(a)

Write a brief note on Enterprise Batch Processing.

➡ Topic:

- Enterprise Batch Processing



Q4(b)

Take a suitable example and explain the concept of MapReduce.

➔ Topic:

- MapReduce Example

★★★★★ Repeated

Q5(a)

Enlist and explain features of HDFS.

➔ Topic:

- HDFS Features

★★★★★ Repeated

 **May 2022**

Q6(a)

Discuss and explain MapReduce model. Give its applications.

➔ Topic:

- MapReduce
- Applications of MapReduce

★★★★★ Repeated

Q6(b)

Write short note on:

- GFS
- HDFS

➔ Topic:

- GFS
- HDFS

★★★★★ Repeated

FREQUENCY ANALYSIS

Topic	2022	2023	2024	Dec 2024	2025	Frequency
MapReduce	✓	✓	✓	✓	✓	★★★★★
GFS	✓	✗	✓	✓	✗	★★★★
HDFS	✓	✓	✓	✓	✗	★★★★★
GFS vs HDFS	✗	✗	✓	✓	✗	★★★★★
BigTable	✗	✗	✓	✓	✓	★★★★★
HBase	✗	✗	✗	✗	✓	★★★
Enterprise Batch Processing	✗	✓	✗	✗	✓	★★★★
Relational Database	✗	✗	✓	✗	✗	★★★
Data Store	✗	✗	✗	✓	✗	★★

MOST REPEATED QUESTION OF UNIT-3

#1 MAPREDUCE 

Appeared:

- ✓ 2022
- ✓ 2023
- ✓ 2024
- ✓ Dec 2024
- ✓ 2025

Expected 2026 Question

Explain MapReduce model with neat diagram, working, shuffling process and applications.

#2 GFS vs HDFS 🔥 🔥 🔥 🔥 🔥

Appeared:

- ✓ 2022
- ✓ 2024
- ✓ Dec 2024

Expected

Compare GFS and HDFS with architecture.

#3 BigTable 🔥 🔥 🔥 🔥 🔥

Appeared:

✓ 2024

✓ Dec 2024

✓ 2025

Expected

Explain BigTable and its architecture.

#4 HDFS 🔥 🔥 🔥 🔥 🔥

Appeared:

- ✓ 2022
- ✓ 2023
- ✓ 2024
- ✓ Dec 2024

Expected

Explain HDFS architecture and features.



MOST IMPORTANT 14 MARK QUESTIONS

Prepare first:

1.

MapReduce model with diagram and applications

2.

Compare GFS and HDFS

3.

HDFS architecture and features

4.

BigTable architecture

5.

BigTable, HBase and Dynamo comparison

6.

Enterprise Batch Processing using MapReduce

MOST IMPORTANT 7 MARK QUESTIONS

1. Define BigTable.
2. Explain HBase.
3. Explain Dynamo.
4. Explain HDFS features.
5. Explain GFS architecture.

6. Explain MapReduce shuffling.
 7. Explain Enterprise Batch Processing.
 8. Explain Relational Database in cloud.
-

SAFE UNIT-3 STRATEGY

If exam is tomorrow:

MUST PREPARE

1. MapReduce
2. GFS vs HDFS
3. HDFS
4. BigTable

These four topics alone cover almost every year's Unit-3 questions.

SECOND PRIORITY

5. HBase
 6. Dynamo
 7. Enterprise Batch Processing
-

FINAL PREDICTION FOR NEXT RGPV PAPER

Very High Probability

- MapReduce Model
- GFS vs HDFS
- HDFS Features
- BigTable

High Probability

- HBase
- Dynamo
- Enterprise Batch Processing

Medium Probability


✓ Relational Operations

✓ Parallel Computing

✓ Parallel Efficiency

Conclusion

From **2022–2025 papers**, the king of Unit–3 is:

 **MapReduce** (asked every year)

Then:

 **HDFS / GFS**

 **BigTable**

If you prepare **MapReduce + HDFS + GFS vs HDFS + BigTable**, you will cover roughly **70–80% of Unit–3 PYQ trend**.