CBCS SCHEME



18CS643

Sixth Semester B.E. Degree Examination, Feb./Mar.2022 Cloud Computing & its Applications

Time: 3 hrs.

Engineering &

IBRAR

Advar, Manga

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- a. What is cloud computing? With neat diagram, explain the cloud computing reference model. (10 Marks)
 - b. With a neat diagram, explain the VMware cloud solution stack.

(10 Marks)

OF

- 2 a. Define virtualization in detail and explain in brief full virtualization and Para Virtualization with its Pros and Cons. (10 Marks)
 - b. Explain the core technologies that play an important role in the realization of cloud computing. (10 Marks)

Module-2

3 a. Classify and explain the various types of clouds.

(10 Marks)

b. Explain in detail public cloud deployment of Aneka cloud.

(10 Marks)

OR

4 a. Explain IaaS based solution for cloud computing.

(10 Marks)

b. Explain the features of the Aneka management tools in terms of infrastructure, platform and applications. Also explain Aneka service model. (10 Marks)

Module-3

5 a. What are the two major techniques used for parallel computing with threads? Explain.

(10 Marks)

b. How Aneka thread is differ from local thread? Explain with diagram.

(10 Marks)

OR

- 6 a. What is work flow? Explain the work flow technologies for designing and executing workflow based applications. (10 Marks)
 - b. Explain MPI reference scenario. Discuss the MPI program structure with the help of neat diagram. (10 Marks)

Module-4

- 7 a. What is data-intensive computing? List eight open challenges in data-intensive computing.
 (10 Marks)
 - b. Explain Aneka Map reduce infrastructure.

(10 Marks)

OR

- 8 a. Write short notes on:
 - (i) Google File System (GFS).
 - (ii) Apache Cassandra.
 - (iii) Amazon simple storage service (S3)

(12 Marks)

b. Explain the variations and extensions methods of Map-reduce in detail.

(08 Marks)

1 of 2





Module-5

9 a. Explain the storage services of cloud platforms.

(08 Marks)

b. With a neat diagram, explain the core service of windows Azure platform used for building scalable applications. (12 Marks)

OR

10 a. Describe the core components of Google App Engine.

(10 Marks)

b. Explain how cloud computing technology can be applied to support remote ECG monitoring. (10 Marks)

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