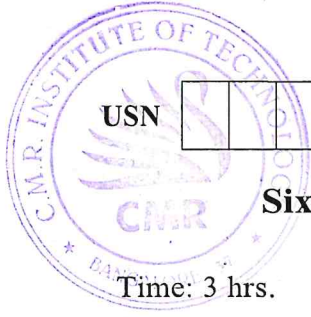


# CBCS SCHEME



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18CS643

Sixth Semester B.E. Degree Examination, Feb./Mar.2022

## Cloud Computing & its Applications

Time: 3 hrs.

Max. Marks: 100

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

### Module-1

- 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)

OR

- 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)

**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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