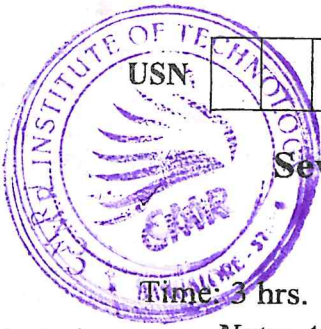


CBCS SCHEME

17CS742



Seventh Semester B.E. Degree Examination, Jan./Feb. 2021 Cloud Computing and 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. Define cloud computing. With a neat diagram, explain major deployment models for cloud computing. (08 Marks)
- b. Explain cloud computing reference model with a neat diagram. (08 Marks)
- c. Discuss major milestones which have lead to cloud computing. (04 Marks)

OR

- 2 a. Describe the characteristics of virtualized environments with the required diagrams. (08 Marks)
- b. With a neat diagram, explain Xen architecture and guest OS management. (06 Marks)
- c. Explain live migration and server consolidation with a neat diagram. (06 Marks)

Module-2

- 3 a. Explain cloud computing architecture with a neat diagram. (08 Marks)
- b. Discuss how SaaS provides access to application through the internet as a web based service. (04 Marks)
- c. Describe the various open challenges in clod computing. (08 Marks)

OR

- 4 a. Discuss the anatomy of Aneka container in detail. (12 Marks)
- b. Explain Aneka hybrid cloud deployment mode with a neat diagram. (08 Marks)

Module-3

- 5 a. What is a thread? Discuss different thread APIs. (06 Marks)
- b. With a neat diagram compare thread life cycle in system threading and Aneka threading. (08 Marks)
- c. Explain Aneka thread application model with a listing for application creation and configuration. (06 Marks)

OR

- 6 a. Explain MPI reference scenario and MPI program structure with the required diagrams. (08 Marks)
- b. Explain task programming model with a neat diagram. (06 Marks)
- c. Discuss how workflows are managed in Aneka with required diagram. (06 Marks)

Module-4

- 7 a. What is data intensive computing? Explain Amazon dynamo architecture with a neat diagram. (10 Marks)
- b. Explain map reduce computation workflow with a neat diagram. (10 Marks)

OR

- 8 a. Discuss the variations and extensions of map reduce. (06 Marks)
b. Describe Aneka map reduce infrastructure with a neat diagram. (08 Marks)
c. Discuss distributed life system support for execution of map reduce job with a neat diagram. (06 Marks)

Module-5

- 9 a. Discuss the storage services provided by AWS. (12 Marks)
b. Explain SQL Azure architecture with a neat diagram. (08 Marks)

OR

- 10 a. Describe how cloud computing can be applied to remote ECG monitoring with a required diagram. (10 Marks)
b. Explain CRM and ERP implementations with three examples and the required diagrams. (10 Marks)
