

CBCS SCHEME

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17CS742

Seventh Semester B.E. Degree Examination, July/August 2021

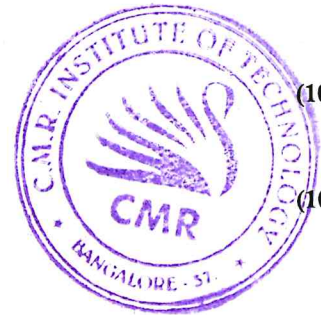
Cloud Computing and Its Applications

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions.

- 1 a. Define cloud computing. Explain the vision of cloud computing with diagram. (10 Marks)
b. List and explain any four cloud computing technologies. (10 Marks)
- 2 a. Illustrate the Taxonomy of virtualization techniques with a neat diagram. (10 Marks)
b. Explain OS level virtualization and application level virtualization. (10 Marks)
- 3 a. Explain the basic components of an IaaS-based solution for cloud computing. (10 Marks)
b. List and explain the types of clouds, supporting with necessary diagrams if any. (10 Marks)
- 4 a. Explain the types of services that are hosted inside the Aneka container. (10 Marks)
b. Explain with a neat diagram the life cycle of service instances within the Aneka container. (10 Marks)
- 5 a. Describe the architecture and functionality of multi-core system. (10 Marks)
b. Briefly explain the Domain Decomposition technique for parallel computation. Also define 2 types of problems identified under domain decomposition. (10 Marks)
- 6 a. Explain how Aneka can be used for the execution of workflows. (10 Marks)
b. Explain how it is possible to run MPI and parameter sweep applications using the task programming model. (10 Marks)
- 7 a. Explain the Map Reducing programming model with respect to Data-intensive computing. (10 Marks)
b. Write brief note on:
(i) Amazon Dynamo (ii) Google Big table
(iii) MongoDB (iv) Apache Cassandra (10 Marks)
- 8 a. Explain Aneka Map Reduce data file format. (10 Marks)
b. Explain Aneka Map Reduce scheduling service and execution service architecture. (10 Marks)
- 9 a. List and explain storage service of AWS. (10 Marks)
b. Define SQL Azure. Explain with neat diagram SQL Azure architecture. (10 Marks)
- 10 a. Explain :
(i) Architecture and overview of the Jeeva Portal.
(ii) The concept of EyeOS with a neat diagram. (10 Marks)
b. Write a note on:
(i) Animoto Reference Architecture.
(ii) DropBox and icloud (10 Marks)



Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.

