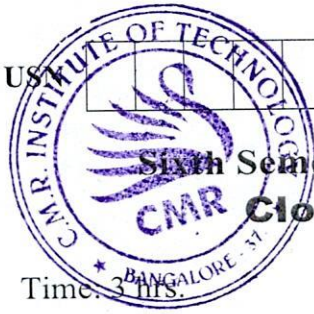


CBCS SCHEME



18CS643

Sixth Semester B.E. Degree Examination, Dec.2024/Jan.2025 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. What is cloud computing? Explain its characteristics and challenges. (10 Marks)
- b. With neat diagram, explain hardware virtualization reference model. (10 Marks)

OR

- 2 a. Explain taxonomy of virtualization technique with neat diagram. (10 Marks)
- b. Explain VMware workstation architecture with neat diagram. (10 Marks)

Module-2

- 3 a. With neat diagram, explain infrastructure as a service reference implementation. (10 Marks)
- b. Explain Aneka framework overview with neat diagram. (10 Marks)

OR

- 4 a. Describe platform as a service reference model with neat diagram. (10 Marks)
- b. Explain 3 types of services that are hosted inside the Aneka container. (10 Marks)

Module-3

- 5 a. Discuss techniques for parallel computation with thread. (10 Marks)
- b. Explain abstract model of a workflow system. (10 Marks)

OR

- 6 a. Compare local thread and Aneka thread life cycles with diagram. (10 Marks)
- b. Explain the features provided by Aneka for the execution of parameter sweep application. (10 Marks)

Module-4

- 7 a. With neat diagram, explain Amazon Dynamo architecture. (10 Marks)
- b. Write short note on : (i) Google Big table (ii) Apache Cassandra (10 Marks)

OR

- 8 a. Explain MapReduce computation workflow with neat diagram. (10 Marks)
- b. With neat diagram, explain Aneka MapReduce data file format. (10 Marks)

Module-5

- 9 a. Explain Google App engine platform architecture with neat diagram. (10 Marks)
- b. Write short note on : (i) Url fetch (ii) Memcache (10 Marks)

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- 10 a. Explain Microsoft Windows Azure platform architecture with neat diagram. (10 Marks)
- b. Write short note on : (i) Blobs (ii) Azure cache. (10 Marks)

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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.