



CBCS SCHEME

18CS643

Sixth Semester B.E. Degree Examination, Dec.2023/Jan.2024

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 cloud computing reference model. (10 Marks)
b. Explain in brief the services provided by the following cloud service providers. (10 Marks)
i) Amazon web services ii) Microsoft Azure.

OR

- 2 a. Explain XEN in detail. (10 Marks)
b. What is virtualization? Explain full virtualization. (10 Marks)

Module-2

- 3 a. Explain in detail public cloud deployment of Azure cloud. (10 Marks)
b. Explain in detail cloud computing architecture. (10 Marks)

OR

- 4 a. Explain infrastructure and hardware as a service. (10 Marks)
b. Explain Azure framework overview in detail. (10 Marks)

Module-3

- 5 a. What is thread? Explain techniques for parallel computation with threads. (10 Marks)
b. Differentiate Azure thread from local thread with diagram. (10 Marks)

OR

- 6 a. What is task computing? Explain with a diagram Task computing scenario. (10 Marks)
b. Explain the following task based application model. (10 Marks)
i) Parameter sweep application ii) MPI application.

Module-4

- 7 a. List open challenges in data intensive computing. Explain Amazon simple storage service (S₃). (10 Marks)
b. Explain MapReduce Execution service architecture. (10 Marks)

OR

- 8 a. Explain Google Map Reduce infrastructure in detail. (10 Marks)
b. Explain Bigtable architecture. (10 Marks)

Module-5

- 9 a. Explain about the storage services of cloud platforms. (10 Marks)
b. Explain Google AppEngine platform architecture in detail. (10 Marks)

OR

- 10 a. Explain ECG analysis in the cloud. (10 Marks)
b. Discuss applications of cloud computing in satellite image processing. (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.