# CBCS SCHEME

USN 18CS643

# Sixth Semester B.E. Degree Examination, Dec.2023/Jan.2024 Cloud Computing and Its Applications

Time: 3 hrs. Max. Marks: 19

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

### Module-1

a. What is cloud computing? Explain could computing reference model.
b. Explain in brief the services provided by the following cloud service providers.
i) Amazon web services ii) Manjrasoft Aneka.

#### OR

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

## Module-2

a. Explain in detail public cloud deployment of Aneka cloud.
 b. Explain in detail cloud computing architecture.

(10 Marks)
(10 Marks)

#### OR

4 a. Explain infrastructure and hardware as a service.

b. Explain Aneka frame work overview in detail.

(10 Marks)

#### Module-3

a. What is thread? Explain techniques for parallel computation with threads.
 b. Differentiate Aneka thread from local thread with diagram.

#### OR

6 a. What is task computing? Explain with a diagram Task computing scenario. (10 Marks)

b. Explain the following task based application model.

i) Parameter sweep application ii) MPI application. (10 Marks)

#### Module-4

 a. List open challenges in data intensive computing. Explain Amazon simple storage service (S<sub>3</sub>).

b. Explain MapReduce Execution service architecture. (16 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.
 b. Explain Google AppEngine platform architecture in detail.
 (10 Marks)
 (10 Marks)

#### OR

10 a. Explain ECG analysis in the cloud. (10 Marks)

Discuss applications of cloud computing in satellite image processing. (10 M.

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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 for equations written eg, 42+8 = 50, will be treated as malpractice