

# CBCS Scheme



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15CS565

**Fifth Semester B.E. Degree Examination, Dec.2017/Jan.2018**

## **Cloud Computing**

Time: 3 hrs.

Max. Marks: 80

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

### Module-1

- 1 a. Define cloud computing. Describe the cloud computing Reference model (08 Marks)
- b. Describe any four characteristics of cloud computing. (04 Marks)
- c. Discuss the Drawbacks of cloud computing. (04 Marks)

**OR**

- 2 a. With a neat diagram, describe the virtualization reference model. (06 Marks)
- b. Define virtualization. Describe the factor that influences the importance of virtualization with respect to cloud computing. (04 Marks)
- c. With a neat diagram, explain the taxonomy of virtualization techniques. (06 Marks)

### Module-2

- 3 a. With a neat diagram and advantages, describe the private cloud Hardware and Software stack. (06 Marks)
- b. Define community cloud. List the candidate sectors and advantages of community cloud. (06 Marks)
- c. Explain any two approaches that make cloud environment economical. (04 Marks)

**OR**

- 4 a. Define Aneka. List and explain the characteristic of Aneka. (05 Marks)
- b. With a neat diagram, describe the logical organization of Aneka cloud. (06 Marks)
- c. With a neat diagram, describe the Aneka service life cycle. (05 Marks)

### Module-3

- 5 a. Define Domain Decomposition. Explain Domain Decomposition considering Matrix Multiplication as an example. (06 Marks)
- b. Explain the importance of computation and communication with respect to the design of parallel and distributed applications. (04 Marks)
- c. Write Aneka code to create a simple application instance and configure it to connect to an Aneka cloud whose index is local. (06 Marks)

**OR**

- 6 a. Define Task. Describe the Message Passing Interface (MPI) program structure. (06 Marks)
- b. List and explain the basic operations of Remote file management provided by Aneka.tasks.dll library. (06 Marks)
- c. Describe the development and monitoring Tools for Aneka Parameter Sweep Model (PSM). (04 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.

**Module-4**

- 7 a. Define Data Intensive Computing. List and explain the characteristics of Data Intensive Computing. (06 Marks)
- b. Describe the characteristics of Google File Systems (GFS) and Amazon Simple Storage Service (S3). (04 Marks)
- c. With a neat diagram, describe Google Big Table architecture. (06 Marks)

**OR**

- 8 a. Write a Map and Reduce functions of Map Reduce Model. Describe the Map Reduce Model Work flow with a neat diagram. (06 Marks)
- b. With a neat diagram, describe Amazon Dynamo architecture. (06 Marks)
- c. Describe any four parameters that can be controlled during execution of an Aneka Map Reduce application. (04 Marks)

**Module-5**

- 9 a. List and explain six major categories of currently available configuration for EC2 instances. (06 Marks)
- b. Define Access Control Policies (ACP) with respect to Amazon S3, Describe five permissions available in ACP. (06 Marks)
- c. Describe Amazon SimpleDB. (04 Marks)

**OR**

- 10 a. List and explain the different types of storage services provided by Microsoft Azure. (05 Marks)
- b. Describe the usage of cloud computing Technology in supporting Remote ECG monitoring. (06 Marks)
- c. Explain the role of cloud technologies for social networking. (05 Marks)

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