

CBCS Scheme

USN

--	--	--	--	--	--	--	--	--	--

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)

Module-4

- 7 a. Define Data Intensive Computing. List and explain the characteristics of Date 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)

* * * * *