CBCS SCHEME

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15CS742

Seventh Semester B.E. Degree Examination, Dec.2019/Jan.2020
Cloud Computing and its Applications

Time: 3 hrs. Max. Marks: 80

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

Module-1

1 a. Describe the main characteristics and benefits of cloud computing. **(04 Marks)**
b. With neat diagram, explain the cloud computing reference model. **(06 Marks)**
c. Explain the technologies on which cloud computing relies. **(06 Marks)**

OR

2 a. Discuss classification or taxonomy of virtualization at different levels. **(08 Marks)**
b. Explain the architecture of Hyper-V and discuss its use in cloud computing. **(08 Marks)**

Module-2

3 a. Classify and explain the various types of clouds. **(08 Marks)**
b. Describe the fundamental features of the economic and business model behind cloud computing. **(08 Marks)**

OR

4 a. Explain the three types of services that are hosted inside the Aneka container. **(08 Marks)**
b. Describe the features of the Aneka management tools in terms of infrastructure, platform and applications. **(08 Marks)**

Module-3

5 a. Describe the two major techniques used for parallel computing with threads. **(08 Marks)**
b. Explain the major differences between Aneka threads and local threads. **(08 Marks)**

OR

6 a. List and explain popular frameworks for task computing. **(08 Marks)**
b. Explain the features provided by Aneka for the execution of parameter sweep applications. **(08 Marks)**

Module-4

7 a. What is data-intensive computing? Explain the open challenges in data-intensive computing. **(08 Marks)**
b. Explain IBM General Parallel File system (GPFS), Google File System (GFS), and Amazon Simple Storage Service (S3). **(08 Marks)**

OR

8 a. Explain the major components of the Aneka Map-reduce programming model. **(08 Marks)**
b. Describe the architecture of the data storage layer designed for Aneka-Map-Reduce and I/O APIs for handling Map-Reduce files. **(08 Marks)**

Module-5

9 a. Explain Amazon S3 key concepts. **(08 Marks)**

b. Describe the core components of Google AppEngine. **(08 Marks)**

OR

10 a. Describe how cloud computing technology can be applied to support remote ECG monitoring. **(08 Marks)**

b. Describe three examples of CRM and ERP implementations based on cloud computing technologies. **(08 Marks)**

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