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18CS643

Sixth Semester B.E. Degree Examination, July/August 2022
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. With neat diagram, explain cloud computing reference model. **(08 Marks)**
    b. List the characteristics and benefits of cloud computing. **(06 Marks)**
    c. Write a note on challenges in cloud computing. **(06 Marks)**

OR

2   a. Explain in brief the services provided by following cloud service provider
       i) Amazon Web Service   ii) Microsoft Azure   iii) Hadoop. **(10 Marks)**
    b. Define virtualization and explain hardware level virtualization with its pro's and con's of virtualization. **(10 Marks)**

Module-2

3   a. Explain the following is detail
       i) Hardware as service   ii) Platform as service   iii) Software as service. **(10 Marks)**
    b. Explain the open challenges faced in cloud computing in detail. **(10 Marks)**

OR

4   a. Explain the following deployment mode platform for building Aneka cloud
       i) Private cloud   ii) Public cloud   iii) Hybrid cloud. **(10 Marks)**
    b. Explain Aneka SDK in detail. **(10 Marks)**

Module-3

5   a. What is thread? Explain the thread API's techniques for parallel computation. **(08 Marks)**
    b. Differentiate Aneka thread with local thread with diagram. **(06 Marks)**
    c. Explain the programming applications with Aneka thread. **(06 Marks)**

OR

6   a. Explain the features of workflow applications with task depenolencies. **(10 Marks)**
    b. List and explain popular framework for task computing. **(10 Marks)**

Module-4

7   a. What is Data Intensive Computing? List all the challenges in data intensive computing and explain each in detail. **(10 Marks)**
    b. Explain Amazon Dynamo architecture that support data intensive applications. **(10 Marks)**

OR

8   a. Explain the following : i) IBM General Parallel File System   ii) Goolge File System   iii) Amazon Simple Storage Service. **(10 Marks)**
    b. Design and Implement an application for log parsing, Mapper and Reducer with Aneka map Reduce. **(10 Marks)**

Module-5

9   a. Describe the core components of Google App Engine. **(10 Marks)**
    b. Explain the Windows Azure platform architecture. **(10 Marks)**

OR

10 a. Discuss in detail the following media applications of cloud computing technologies.
       i) Animoto   ii) Maya Rendering with Aneka   iii) Video encoding on cloud. **(12 Marks)**
    b. Explain in detail about the application of cloud computing in satellite Image processing. **(08 Marks)**

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