CBCS SCHEME

USN ☐☐☐☐☐☐☐☐☐☐   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.
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