Seventh Semester B.E. Degree Examination, June/July 2023
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. Define Cloud Computing. Explain cloud computing reference model with a neat diagram. **(10 Marks)**
  b. List and explain cloud computing platforms and technologies. **(10 Marks)**

OR

2 a. Explain the characteristics of virtualized environment with a neat diagram. **(10 Marks)**
  b. With a neat diagram, explain Xen architecture and guest OS management. **(10 Marks)**

Module-2

3 a. Explain cloud computing architecture with a neat diagram. **(10 Marks)**
  b. List and explain the open challenges in cloud computing. **(10 Marks)**

OR

4 a. How do you build aneka clouds? Explain infrastructure and logical organizer of building Aneka clouds. **(10 Marks)**
  b. Discuss Hybrid deployment mode in Aneka. **(10 Marks)**

Module-3

5 a. List out the difference between Aneka thread vs common thread. Explain any three in detail. **(10 Marks)**
  b. With a neat diagram compare thread life cycle in System threading and Aneka threading. **(10 Marks)**

OR

6 a. List and explain computing categories which impose requirements on the infrastructure and middle ware. **(10 Marks)**
  b. Discuss some popular software systems that supports the task computing framework. **(10 Marks)**

Module-4

7 a. What is Data Intensive Computing? Describe the open challenges in Data intensive computing. **(10 Marks)**
  b. Explain MapReduce computation workflow with a neat diagram. **(10 Marks)**

OR

8 a. List and explain the variations and extensions of MapReduce. **(10 Marks)**
  b. Discuss briefly MapReduce Abstractions Object Model. **(10 Marks)**

Module-5

9 a. Discuss the storage services provided by AWS. **(10 Marks)**
  b. List and explain Application Services of Google App Engine. **(10 Marks)**

OR

10 a. Discuss how cloud computing can be applied in Biology : Protein structure prediction and gene expression data analysis for cancer diagnosis. **(10 Marks)**
   b. Define CRM and ERP firms. Explain how they are implemented in cloud supporting Business and Consumer Applications. **(10 Marks)**

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