CBCS SCHEME

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15CS742

Seventh Semester B.E. Degree Examination, July/August 2022
Cloud Computing and its Application

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. Explain the cloud computing reference model.　**(08 Marks)**
　　b.　List and explain any 2 major milestones of distributed system that led to the evolution of cloud computing.　**(04 Marks)**
　　c.　Describe any four characteristics of cloud computing.　**(04 Marks)**

OR

2　a.　Define Virtualization. Explain virtualization reference model with neat diagram.　**(08 Marks)**
　　b.　List and explain 2 major types of hypervisor used in hardware virtualization.　**(04 Marks)**
　　c.　Explain Pros and Cons of virtualization.　**(04 Marks)**

Module-2

3　a.　Explain the cloud computing architecture, a layered view covering the entire stack of resources.　**(08 Marks)**
　　b.　Define community cloud with neat diagram.　**(04 Marks)**
　　c.　List all and explain 3 open challenges in cloud computing.　**(04 Marks)**

OR

4　a.　Define Iaas. Explain Iaas reference implementation with neat diagram.　**(08 Marks)**
　　b.　With a neat diagram, explain the Aneka framework overview.　**(08 Marks)**

Module-3

5　a.　Define domain decomposition. Explain domain decomposition considering matrix multiplication.　**(08 Marks)**
　　b.　Define thread. With neat diagram explain the relationship between process and thread.　**(08 Marks)**

OR

6　a.　What is multiprocessing? Describe the architecture and functionality of multicore system.　**(08 Marks)**
　　b.　Explain Message Passing Interface (MPI) program structure with neat diagram.　**(08 Marks)**

Module-4

7　a.　What is data – intensive computing? List out the open challenges in data – intensive computing given by Ian Gorton etal.　**(08 Marks)**
　　b.　With a help of neat diagram, describe Google Big Table Architecture.　**(08 Marks)**

8 a. With a neat diagram, explain Google MapReduce infrastructure overview. (08 Marks)

b. List of the characteristic of
   i) Google File System (GFS)
   ii) Amazon Simple Storage System (S3)
   iii) 1BM General Parallel Five System (GPFs). (08 Marks)

Module-5

9 a. Define AWS. What is EC2? List six major categories currently available configuration for EC2. (08 Marks)

b. With neat diagram explain Google App engine platform architecture. (08 Marks)

OR

10 a. Write a short note on any two :
   i) Drop box
   ii) i cloud
   iii) Microsoft windows Azure. (08 Marks)

b. Write a note on heat care : ECG A Analysis in cloud with neat diagram. (08 Marks)

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