USN | | | | | | | | | |

18CS643

Sixth Semester B.E. Degree Examination, Dec.2024/Jan.2025
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. What is cloud computing? Explain its characteristics and challenges. **(10 Marks)**
   b. With neat diagram, explain hardware virtualization reference model. **(10 Marks)**

OR

2 a. Explain taxonomy of virtualization technique with neat diagram. **(10 Marks)**
   b. Explain VMware workstation architecture with neat diagram. **(10 Marks)**

Module-2

3 a. With neat diagram, explain infrastructure as a service reference implementation. **(10 Marks)**
   b. Explain Aneka framework overview with neat diagram. **(10 Marks)**

OR

4 a. Describe platform as a service reference model with neat diagram. **(10 Marks)**
   b. Explain 3 types of services that are hosted inside the Aneka container. **(10 Marks)**

Module-3

5 a. Discuss techniques for parallel computation with thread. **(10 Marks)**
   b. Explain abstract model of a workflow system. **(10 Marks)**

OR

6 a. Compare local thread and Aneka thread life cycles with diagram. **(10 Marks)**
   b. Explain the features provided by Aneka for the execution of parameter sweep application. **(10 Marks)**

Module-4

7 a. With neat diagram, explain Amazon Dynamo architecture. **(10 Marks)**
   b. Write short note on : (i) Google Big table   (ii) Apache Cassandra **(10 Marks)**

OR

8 a. Explain MapReduce computation workflow with neat diagram. **(10 Marks)**
   b. With neat diagram, explain Aneka MapReduce data file format. **(10 Marks)**

Module-5

9 a. Explain Google App engine platform architecture with neat diagram. **(10 Marks)**
   b. Write short note on : (i) Url fetch   (ii) Memcache **(10 Marks)**

OR

10 a. Explain Microsoft Windows Azure platform architecture with neat diagram. **(10 Marks)**
    b. Write short note on : (i) Blobs   (ii) Azure cache. **(10 Marks)**

* * * * *