

Seventh Semester B.E. Degree Examination, Aug./Sept. 2020
Cloud Computing and its Applications

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Briefly explain the core technologies that play an important role in the realization of cloud computing. (08 Marks)
b. With a neat diagram, explain the VMWare cloud solution stack. (08 Marks)

OR

- 2 a. Explain the paravirtualization technique supported in xen along with its architecture. (06 Marks)
b. Explain the characteristics of virtualized environment. (06 Marks)
c. Briefly explain the different hardware virtualization techniques. (04 Marks)

Module-2

- 3 a. Briefly explain the different types of clouds. (08 Marks)
b. With a neat diagram, explain the Infrastructure as a Service (IaaS) reference implementation. (08 Marks)

OR

- 4 a. Explain any two services hosted inside the Aneka container. (08 Marks)
b. With a neat diagram, explain the Cloud Computing Architecture. (08 Marks)

Module-3

- 5 a. What is Task Programming Model? With a neat diagram, explain the task programming model scenario. (08 Marks)
b. What is workflow? Explain the workflow technologies for designing and executing workflow based applications. (08 Marks)

OR

- 6 a. Explain MPI reference scenario. Discuss the MPI program structure, with neat diagram. (10 Marks)
b. Explain domain decomposition and functional decomposition techniques for parallel computation. (06 Marks)

Module-4

- 7 a. Write short notes on
i) Google File System (GFS)
ii) Apache Cassandra
iii) Amazon Simple Storage Service (S3) (09 Marks)
b. With a neat diagram, explain Amazon dynamo Architecture. (07 Marks)

OR

- 8 a. Explain MapReduce programming model using MapReduce computation workflow. (10 Marks)
b. With a neat diagram, explain Aneka MapReduce Data file format. (06 Marks)

Module-5

- 9 a. With a neat diagram, explain the Google AppEngine Platform Architecture. (10 Marks)
b. Explain the following : (06 Marks)
i) Dropbox ii) Animoto.

OR

- 10 a. With a neat diagram, Explain the core service of windows Azure platform used for building scalable applications. (12 Marks)
b. Explain CRM and ERP applications in the cloud. (04 Marks)