USN ☐☐☐☐☐☐☐☐☐☐

10CS/IS845

Eighth Semester B.E. Degree Examination, July/August 2021
Clouds, Grids and Clusters

Time: 3 hrs.

Max. Marks:100

Note: *Answer any FIVE full questions.*

1 a. Define Cloud. With neat diagram, explain briefly cloud components. **(10 Marks)**
   b. Write a note on virtualization. **(04 Marks)**
   c. Explain 3 different major implementations of cloud computing. **(06 Marks)**

2 a. List and explain operational and economic benefits of cloud computing. **(10 Marks)**
   b. Explain Thomson reuters with its working principles. **(10 Marks)**

3 a. Define client and its types in cloud computing. **(08 Marks)**
   b. Explain briefly different levels of connectivity options to access the cloud via Internet. **(12 Marks)**

4 a. Define SaaS. List out its advantages to organization pursuing SaaS. **(10 Marks)**
   b. Write a note on most popular cloud application. **(10 Marks)**

5 a. Define Meta computer. Explain its components. **(10 Marks)**
   b. List out of the key functional requirements in Grid computing. Explain briefly layered architecture of a grid. . **(10 Marks)**

6 a. Write a note on following:
   (i) Legion
   (ii) Condor
   (iii) Condor G
   (iv) Nirmod
   (v) NMI. **(10 Marks)**
   b. Explain briefly:
   (i) Service Oriented Architecture
   (ii) Server side architecture. **(10 Marks)**

7 a. Explain briefly cluster programming environment and tools. **(12 Marks)**
   b. Discuss briefly basic architecture of a cluster. **(08 Marks)**

8 a. Explain briefly various alternative cluster configuration for high availability. **(10 Marks)**
   b. Define Job Management system. Explain its function. **(10 Marks)**

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