

Code No: 5158N

R13

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M. Tech II Semester Examinations, October - 2015

GRID AND CLOUD COMPUTING

(Computer Science and Engineering)

Time: 3 Hours

Max. Marks: 60

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 20 marks. Answer all questions in Part A.
Part B consists of 5 Units. Answer any one full question from each unit.
Each question carries 8 marks and may have a, b, c as sub questions.

PART - A

5 × 4 marks = 20

- 1.a) Define the terms security, privacy and availability. [4]
- b) Write a note on Infrastructure as a service. [4]
- c) Explain the Pros and Cons of Cloud Computing. [4]
- d) Discuss the Map Reduce workflow. [4]
- e) Give a brief note on fuzzy trust model. [4]

PART - B

5 × 8 marks = 40

2. List and explain the classification of parallel and distributed computing systems. [8]
- OR
- 3.a) Give a brief note on cluster architecture.
- b) Discuss the features of data and databases. [4+4]
4. Draw and explain the various layers of service oriented architecture. [8]
- OR
5. Explain the standard data center networking for the cloud to access the internet. [8]
- 6.a) What is meant by virtualization? Explain the different computing models.
- b) Discuss the hypervisor and Xen Architecture. [4+4]
- OR
- 7.a) Describe the Virtualization and Cloud Computing.
- b) Explain the VMware server architecture using Para - virtualization. [4+4]
- 8.a) Draw and explain the nimbus cloud infrastructure.
- b) Discuss the open source eucalyptus and nimbus. [4+4]
- OR
9. Illustrate the data flow in running a Map Reduce job at various task trackers using the Hadoop library. [8]
10. Explain the four architectural models for building a data grid with a neat diagram. [8]
- OR
11. Discuss the producer/consumer model for grid monitoring. [8]

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