

SSN COLLEGE OF ENGINEERING
Department of Computer Science and Engineering
B.E. Computer Science
CS6703 - GRID AND CLOUD COMPUTING

10 AUG 2017, 8 - 9.30 AM
Academic Year: 2017-18 ODD

Unit Test 1 - Retest

Max Marks: 50
Batch: 2014-18

Faculty: Dr. K. Vallidevi / Ms. Y. V. Lokeswari

PART A

$5 \times 2 = 10$

1. What are the drawbacks of Virtualization (CO2) (K2)
2. Breif about Virtual Machine operations (CO2) (K2)
3. What type of Virtualization is more suitable in IaaS, PaaS and SaaS service layers? Justify your answer. (CO2) (K3)
4. Brief about OS-Level Virtualization (CO2) (K2)
5. What is a Virtual Core (CO2) (K2)

PART B

33 MARKS

***** Answer All Questions *****

6. (a) Explain about the following technologies and emphasise how one technology differs from another. (CO1) (K2) (10)
 - (i) Cluster Computing.
 - (ii) Peer to Peer Systems.
 - (iii) Grid Computing.
 - (iv) Cloud Computing.
 - (v) Internet of Things.

(OR)

- (b) Explain the working of Full Virtualization with Binary Translation. (CO2) (K2) (10)

7. (a) Briefly explain different virtualization levels with a neat layered diagram. Discuss their relative advantage and limitations. Identify an example system implemented in each level. (CO2) (6 + 4 + 2)
(K2)

(OR)

- (b) (i) Imagine a situation where you are owning a company with 1000 computers which can process and store huge data. As days and years pass on, your business requirements increase and you face a situation where the existing computer resources are not sufficient. You need to expand your infrastructure with lowest cost as possible. Remember that applications that you run in your infrastructure should be in a secure environment. What type of technology is more suitable to this situation. Justify your answer with detailed explanation. (CO3) (K3) (5)
- (ii) Explain the Cloud Deployment models and Services of Cloud Computing with two examples for each service. (CO3) (K2) (7)
8. (a) (i) Describe the various steps for live VM migration and its performance effects. (CO2) (K2) (10)
- (ii) What are different copy strategies in live migration of VM. Give their advantages and disadvantages. (CO2) (K2) (6)
- (OR)
- (b) (i) Explain how CPU could be Virtualized. (CO2) (K2) (5)
- (ii) Explain how memory is virtualized with diagram. (CO2) (K2) (5)
- (iii) Explain the 3 different ways in which a VM can be implemented with diagram. (CO2) (K2) (6)

***ALL THE BEST ***

Prepared by

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Reviewed by

HoD, CSE