

**Code No: 117BN****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech IV Year I Semester Examinations, March - 2017****CLOUD COMPUTING****(Computer Science and Engineering)****Time: 3 Hours****Max. Marks: 75****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

**Part- A (25 Marks)**

- 1.a) What is parallel computing? [2]
- b) Explain the need of virtual machine? [3]
- c) What is Virtualization? [2]
- d) Explain the features of cloud computing? [3]
- e) What is cloud infrastructure? [2]
- f) Explain Leasing model? [3]
- g) What is the need for Cloud Mashups? [2]
- h) What are the Key Components of a Service-Level Agreement? [3]
- i) What is organizational readiness? [2]
- j) What is production readiness? [3]

**Part-B (50 Marks)**

2. Explain the Distributed System Models. [10]  
**OR**
- 3.a) Explain virtualization of clusters.  
b) Describe the data model for virtual machine. [5+5]
- 4.a) Give an overview of enterprise cloud computing paradigm.  
b) Explain the seven-step model of migration into a cloud. [5+5]  
**OR**
- 5.a) Explain the cloud integration methodologies.  
b) Describe the cloud supply chain(C-SC). [5+5]
- 6.a) Explain the Virtual Machine(VM) provisioning process.  
b) Describe the life cycle of a VM within OpenNebula. [5+5]  
**OR**
- 7.a) Explain the Amazon Elastic Compute Cloud (EC2).  
b) Explain features of Cluster as a Service (CaaS). [5+5]

- 8.a) Describe the model for federated cloud computing.  
b) Discuss the performance-related issues of HPC in the Cloud. [5+5]

**OR**

- 9.a) Explain the Business Benefits of Cloud Computing.  
b) Explain the cloud best practices. [5+5]

- 10.a) Explain the Organizational Readiness Self-Assessment.  
b) Describe the Lewin's Change Management Model. [5+5]

**OR**

- 11.a) Distinguish Cloud Computing from Outsourcing and Provision of Application Services.  
b) Explain the Cloud service lifecycle. [5+5]

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