

Code No: 117BN

**R13****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech IV Year I Semester Examinations, November/December - 2016****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**

- 1 a) Differentiate between parallel and distributed computing Paradigms. (25 Marks) [2]  
b) Define Virtual Machines and with neat diagrams explain VM Primitive operations. [3]  
c) Define PaaS and give any application/enterprise run by using PaaS. [2]  
d) Write a short note on desired features of a Cloud. [2]  
e) Explain briefly Public Cloud and Infrastructure Services. [3]  
f) Explain Virtual Machine life cycle with a neat diagram. [2]  
g) What are the benefits and obstacles for Cloud Mashups? [3]  
h) Explain the applications of cloud. [2]  
i) Write a short note on SLA Management. [3]  
j) Write a short note on the current state of the Data Security in the Cloud. [3]

**PART-B**

- 2 a) Write a short note on Performance Metrics and Scalability Analysis of Distributed systems. (50 Marks) [5+5]  
b) Explain the role of Fault Tolerance and System Availability in Distributed Computing System. [5+5]

**OR**

- 3 a) Explain the basic Cluster Architecture with a neat diagram. [5+5]  
b) Write a short note on Fault-Tolerant Cluster Configurations. [5+5]

- 4 a) Explain the challenges faced by SaaS paradigm in Cloud Computing. [5+5]  
b) Explain the three Integration Methodologies used for cloud integration. [5+5]

**OR**

- 5 a) Explain the four Enterprise Cloud Adaption Strategies using fundamental cloud drivers. [5+5]  
b) Write a short note on Porter's five forces market model. [5+5]

- 6 a) Explain various Migration techniques used in Virtual Machine Migration. [5+5]  
b) Explain Aneka framework architecture with a neat diagram. [5+5]

**OR**

- 7 a) Explain Comet-Cloud Architecture with a neat diagram. [5+5]  
b) Write a short note on importance of Quality and Security in Cloud. [5+5]

- 8 a) Write a short note on basic principles of cloud computing. [5+5]  
b) Explain briefly the Layers Enhancements for Federation (RESERVOIR Architecture). [5+5]

**OR**

- 9 a) Write a short note on Traditional Approach to SLA Management. [5+5]  
b) Write a short note on the need for Cloud Mashups and various concepts of Cloud Mashups. [5+5]

- 10 a) Explain briefly the framework to comprehend the competitive environment in Cloud Computing. [5+5]  
b) Write a short note on Change Management Maturity Model (CMMM). [5+5]

**OR**

- 11 a) Explain in detail the idea of "Cloud Computing and Identity" in Cloud Security. [5+5]  
b) Explain how Cloud Computing is different from Outsourcing and Provision of Application Services. [5+5]