NARSIMHA REDDY ENGINEERING COLLEGE
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Maisammaguda (V), Kompally - 500100, Secunderabad, Telangana state, India

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year I Semester Examinations, November/December – 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)

a)   Describe computational grids.   [2]
b)   Explain any three services offered by cloud.   [3]
c)   Explain Storage virtualization.   [2]
d)   Explain high availability and data recovery.   [3]
e)   Explain Open nebula.   [2]
f)   What is lease scheduling?   [3]
g)   What are the business benefits of cloud computing?   [2]
h)   Explain Virtual administration in cloud.   [3]
i)   Explain data Interoperability in cloud.   [2]
j)   Explain software Vulnerability and Breaches in cloud.   [3]

PART-B   (50 Marks)

2.a)   Elucidate Network threats and data integrity.
  b)   Briefly explain the design principles of computer clusters.   [5+5]
OR
3.a)   Explain system models for distributed and cloud computing.
  b)   What are the design objectives of computer clusters?   [5+5]

4.a)   Describe various deployment models in cloud.
  b)   Elucidate hardware virtualization.   [5+5]
OR
5.a)   Explain the functions and types of Hypervisors.
  b)   Describe the features, challenges and risks in cloud computing.   [5+5]

6.a)   Elucidate Amazon Elastic cloud computing.
  b)   Explain the architecture of Eucalyptus.   [5+5]
OR
7.   Explain the implementation of hybrid cloud.   [10]

8.a)   Explain a model for federal cloud computing.
  b)   Explain the best practices to build an application on cloud.   [5+5]
     OR
9.a)   What are the External threats and Internal threats of virtualization infrastructure.

b)   Elucidate SLA management in cloud.   [5+5]

10.a)   Elicit the pros and cons of content level security.
    b)   Distinguish Cloud Computing from outsourcing and provision of application services.
                                                                          [5+5]

OR

11.   Elucidate Cloud service life cycle.   [10]

IV B.Tech II Semester Supplementary Examinations, July/August - 2017
CLOUD COMPUTING
(Common to Electronics & Communication Engineering and Computer Science & Engineering)

Time: 3 hours   **Max. Marks: 70**

Question paper consists of Part-A and Part-B
Answer ALL sub questions from Part-A
Answer any THREE questions from Part-B

PART–A *(22 Marks)*
1. a)   Explain about the Energy efficiency in Distributed computing.   [4]
    b)   How virtualization can be implemented in the multi-core processors.   [3]
    c)   Write a short note on Google App Engine   [4]
    d)   What are the traditional features common to grids and clouds.   [4]
    e)   What is Start- Time Fair query? Explain.   [3]
    f)   Explain briefly about the general Parallel File System.   [4]

PART–B *(3x16 = 48 Marks)*
2. a)   What are the advantages of Cloud Computing over the Internet? Explain?   [8]
    b)   Give the architecture of P2P systems. What are the major categories of P2P
         Network families?   [8]

3. a)   Explain the differences between full-virtualization and para-virtualization and
         give one example VMM (virtual machine monitor), that was built in each of the
         two categories.   [8]
    b)   Write and explain about intel hardware support for virtualization of processor,
         memory and I/O Devices?   [8]

4. a)   Explain about Resource provisioning and Platform deployment?   [8]
    b)   What is SOA? Discuss with architecture how two software communicate using [8]
         SOA.

5. a) Write and explain about programming on Amazon AWS and Microsoft Azure? [8]
   b) What are emerging cloud software environments? Explain with examples? [8]

6. a) Write about the scheduling algorithms for computing clouds. [8]
   b) Explain the cloud scheduling subject to deadlines? [8]

7. a) Discuss the megastore model with an example? [8]
   b) "blinding performance depends on removing overhead." Comment on this argument regarding the *NoSQL* concept [8]