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14SCS/SCE12

First Semester M.Tech. Degree Examination, Dec.2014/Jan.2015
Cloud Computing

Time: 3 hrs. Max. Marks:100

Note: ***Answer any FIVE full questions.***

1 a. Define cloud computing. Explain the different types of delivery models in a cloud, with a neat diagram. **(10 Marks)**

b. With the neat diagram, explain the components of windows azure. **(10 Marks)**

2 a. Explain the concept of interoperability in cloud. **(08 Marks)**

b. Define SLA. List the objectives of SLA. **(06 Marks)**

c. What are the challenges for licensing software in cloud computing? **(06 Marks)**

3 a. Briefly explain different workflow patterns in a cloud. **(10 Marks)**

b. With the architecture, explain the map-reducing programming model. **(10 Marks)**

4 a. What is the need of layering and virtualization in cloud? Explain with architecture. **(10 Marks)**

b. What are the problems faced by virtualization of the x86 architecture. **(06 Marks)**

c. Write the difference between CPU virtualization and memory virtualization in an x86 – 64 Itanium processor. **(04 Marks)**

5 a. Explain two – level resource allocation architecture based on control theory concept for the cloud. **(06 Marks)**

b. Briefly explain ASCA combinational auction algorithm with a schematic block diagram. **(08 Marks)**

c. Explain the approach for co-orientating power and performance management in cloud. **(06 Marks)**

6 a. What are the different classes of risk in cloud for providing security? **(08 Marks)**

b. With a neat diagram, explain virtual security services provided by vmm. **(08 Marks)**

c. List the various design goals of x_{oar}. **(04 Marks)**

7 a. Explain security rules for application and transport layer protocols in EC2. **(10 Marks)**

b. What are the software packages used to install Hadoop on eclipse on a windows systems? Write the pre requisites and SSH installation. **(10 Marks)**

8 Write a short notes on the following :

a. Cloud computing in Google perspective

b. Software fault isolation

c. The Grep the web application

d. Pricing and allocation algorithm. **(20 Marks)**

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