Reg. No. ☐☐☐☐☐☐☐☐☐☐☐☐

## Question Paper Code: X10327

### B.E./B.Tech. DEGREE EXAMINATIONS NOVEMBER/DECEMBER 2020

### Seventh Semester

### Information Technology

### CS8791 – CLOUD COMPUTING

### (Common to Computer Science and Engineering)

### (Regulations 2017)

Time : 3 Hours          Answer ALL Questions          Max. Marks: 100

### PART-A (10 x 2 = 20 Marks)

1. List the main characteristics of cloud computing

2. Illustrate the virtual appliances in cloud computing.

3. Differentiate full virtualization and para-virtualization

4. Outline the requirements of VMM.

5. Differentiate Public cloud and Private cloud.

6. Summarize the benefits and drawbacks of using "Platform as a Service".

7. Point out the layers in security architecture design.

8. Identify the uses of application security.

9. Outline the main services that are offered by AWS.

10. Identify the development technologies currently supported by AppEngine.


### Part – B ( 5 x 13 = 65 Marks)

11. a) Explain the following challenges in cloud.
   i) Security.                                                      (5)
   ii) Data lock-in and Standardization.                   (5)
   iii) Fault tolerance and Disaster recovery.            (3)

**OR**

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b) Outline the computing platforms and technologies for the development of cloud computing applications. (13)

12. a) Explain the different phenomenon that has gained an interest towards virtualization technologies. (13)

**OR**

b) Explain about Virtualization for Linux and Windows and NT Platform. Design the process of Live Migration of VM from one host to another. (13)

13. a) Explain the various Layered Cloud Architectural Development design for effective cloud computing environment. (13)

**OR**

b) Demonstrate the architectural design of compute and storage clouds. (13)

14. a) Describe the Secure Software Development Life Cycle with neat diagram. (13)

**OR**

b) Analyze the methods for providing data security and virtual machine security in cloud. (13)

15. a) i. Illustrate the functional Modules of GAE (6)

ii. Discuss in detail about GAE Applications (7)

**OR**

b) List the four levels of cloud federation and explain in detail about the four levels of federation levels. (13)

## PART C (1 X 15 = 15 Marks)

16. a) Compare and Contrast the Key privacy issues in Cloud and explain the steps to overcome the issues with necessary examples. (15)

**OR**

b) Combine the role of a distributed file system in a job execution environment such as MapReduce in a large-scale cloud system and explain in detail with suitable illustrations. (15)

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