

**REVA**
UNIVERSITY

Bengaluru, India

Sixth Semester B.TECH Examination June 2017**Course: Virtualization & Cloud Computing****Code: BTCS15F6200****Duration: 3 hours****Max. Marks: 100**

- Note:** 1. Answer one full question choosing from each Section.
2. Your answer should be specific to the questions asked.

REVA - LIBRARY**Section-I(UNIT-I)**

1. a) Blueprint at least three definitions of cloud computing opined by different experts. 10
- b) List six specific characteristics of cloud computing. Explain any two of them in detail. 5
- c) Discuss the Risks and Challenges involved in cloud computing. 10

OR

2. a) State what is a hypervisor and how it is controlled by VIM and also mention the uses of it in virtualization. 5
- b) Compare and contrast different deployment models of cloud and also state in what scenario each model is useful. 10
- c) List three advantage and disadvantages of cloud computing and also explain the advantages. 10

Section-II(UNIT-II)

3. a) Explain the following: 15
 - i. Logical Network Perimeter
 - ii. Cloud Storage Device
 - iii. Resource Replication
- b) Discuss any two data center technology. 10

OR

4. a) Explain the significance of virtual servers in context of cloud computing. 9
- b) Discuss several cloud storage levels. 8
- c) What is hypervisor? Discuss how it provides virtualization and also explain how it is controlled by VIM. 8

Section-III(UNIT-III)

5. a) Write a note on SLA monitor and also discuss how QoS requirements are fulfilled. 7
- b) Explain the following: 10
 - i. Load Balancer
 - ii. Pay-Per Use Monitor
 - iii. Failover System
 - iv. Resource Cluster
- c) Write a note on Automated Scaling Listener. 8

OR

6. a) Discuss how to use Multi Device broker mechanism for cloud service and also discuss how it facilitates runtime data transformations. 10
- b) With respect to cloud management mechanism, explain the significance of resource management system. 10
- c) With respect to cloud management mechanism, explain the significance of billing management system. 5

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Section-IV(UNIT-IV)

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| 7. | a) | Discuss different level of Virtualization implementation. | 8 |
| | b) | Enumerate the virtualization techniques and its advantages. | 12 |
| | c) | Justify the significance of virtualization support at OS level. | 5 |

OR

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|----|----|---|----|
| 8. | a) | Mention the characteristics of virtualized environments? Explain in detail with the help of examples. | 10 |
| | b) | Discuss the CPU virtualization. | 9 |
| | c) | Outline the disadvantages of virtualization? | 6 |
