

**Sixth Semester B.Tech CSE Semester End Examination May/June 2018****Course (Subject): Virtualization & Cloud Computing****Course Code:****BTCS15F6200****Time: 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.

UNIT-I

- 1 a) Cloud computing as a definition remains very controversial. When asked to define cloud computing, definition is stated liable to a particular application with no unanimous definition, making it altogether vague. In this context, state at least three definitions of cloud computing opined by different experts. 10
- b) Appraise six specific characteristics of cloud computing. Explain any two of them in detail. 5
- c) Elucidate the Risks and Challenges involved in cloud computing. 10

OR

- 2 a) State what is a hypervisor and how it is controlled by VIM. Justify its significance 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. Explain any three advantages in detail. 10

UNIT-II

3. a) Dissertate 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 various cloud storage levels. 8
- c) Show the Inter-networking architecture of an Internet-based deployment model. Also explain it. 8

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.

OR

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| 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 |

UNIT-IV

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| 7. a) | Discuss different levels 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 |
