Total No. of Questions : 8]

PA-939

SEAT No. :

[Total No. of Pages : 2

[5927]-380 B.E. (E & TC) CLOUD COMPUTING (2019 Pattern) (Semester - VII) (404183)

Time : 2½ Hours J Instructions to the candidates: [Max. Marks : 70

[6]

[6]

[6]

[6]

[5]

- 1) Answer Q.1 or Q.2 and Q.3 or Q.4 and Q.5 or Q.6 and Q.7 or Q.8.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Assume suitable data, if necessary.

Q1) a) Define virtualization. Explain the characteristics and benefits of virtualization.

- b) Describe operating system virtualization with the help of suitable diagram.
- c) Differentiate between Type 1 and Type 2 hypervisor.
- *Q2)* a) Explain benefits of virtual clusters and differentiate between virtual cluster and physical cluster. [6]
 - b) Explain the methods of storage virtualization.
 - c) Describe various implementation levels of virtualization.

Q3) a) Discuss the types of data security in detail.

- b) Draw and explain the cloud CIA security model. [6]
- c) Write a note on cloud computing life cycle.

OR

Q4) a)	Describe fundamental components and characteristics of service oriented	
	architecture.	[6]
b)	Explain the role of host security in SaaS, Paas and IaaS.	[6]
c)	Write a note on Firewall.	[5]
		<i>P.T.O.</i>

Explain the different cloud computing platforms. **Q5)** a) [6] Draw and explain the architecture of Google App Engine. b) [6] Differentiate between Google cloud platform and Amazon Web Services. c) [6] Discuss the various roles provided by Azure operating system in compute **Q6)** a) services. [6] Draw and elaborate various components of Amazon Web Service (AWS) b) architecture [6] Describe the steps involved in creating an EC2 instance. [6] c) Write a note on distributed computing. **Q**7) a) [6] Identify and elaborate different IoT enabling technologies. b) [6] c) Describe the different types of distributed systems. [5]

- Write a note on role of embedded system in implementation of IoT. [6] **Q8)** a)
 - 6 Strangenerses Describe any two innovative applications of Internet of Things. b)
 - Describe the IoT application for online social networking. c)
 - BCB EDE

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