Total No. of Questions : 10]

P3643

SEAT No. :

[Total No. of Pages : 2

[Max. Marks:70

[5560] - 599

## T. E. (Information Technology) CLOUD COMPUTING (2015 Pattern) (Semester - II) (314453)

*Time : 2<sup>1</sup>/<sub>2</sub> Hours] Instructions to the candidates:* 

- 1) Answer Question 1 or 2, 3 or 4, 5 or 6, 7 or 8, 9 or 10.
- 2) Figures to the right indicate full marks.
- **Q1)** a) List cloud enabling technologies. Explain any two in details. [4]
  - b) Compare and contrast IaaS, SaaS, PaaS related to consumer activities and provider activities. [6]

## OR

- Q2) a) What is the difference between horizontal scaling and vertical scaling?[4]
  - b) Explain different types of hypervisors with examples.
- **Q3)** a) Write a short note on OpenStack Compute.
  - b) Compare KVM, XEN and VMW are work station.

## OR

Q4) a) Draw and explain programming environment of Google App Engine.[4]
b) Draw and explain Amazon EC2 execution environment. [6]

- Q5) a) How are security policies and security mechanisms used to counter threats by threat agents? [8]
  - b) Explain in Virtualization attack in detail with suitable diagrams. [8]

[6]

- Q6) a) What is the role of a threat agent? List and describe three different threat agents.[8]
  - b) What is hardened virtual server image? How is it used as a cloud server mechanism? [8]
- (Q7) a) Draw and explain architecture of NASA's Nebula Cloud. [8]
  - b) Explain the concept of cloudlet. Differentiate between cloud and cloudlet.

## OR

- (Q8) a) Explain the concept of cloud mashup. Draw and explain architecture of IoT.[8]
  - b) Draw and explain architecture of Facebook platform. [8]
- Q9) a) What is a Docker? Draw and explain Docker deployment workflow.[10]
  b) Explain key issues related to energy efficiency in cloud computing. [8]

OR

**Q10)** Explain following concepts with diagrams

[18]

[8]

- a) Autonomic cloud engine
- b) Multimedia cloud
- c) Jungle computing