

# 315325

**12526**

**3 Hours / 70 Marks**

Seat No. 

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- Instructions* – (1) All Questions are *Compulsory*.
- (2) Answer each next main Question on a new page.
- (3) Illustrate your answer with neat sketches wherever necessary.
- (4) Figures to the right indicate full marks.
- (5) Assume suitable data, if necessary.
- (6) Use of Non-programmable Electronic Pocket Calculator is permissible.
- (7) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

**Marks**

- 1. Attempt any FIVE of the following: **10****
- a) Define term cloud computing.
- b) List any two characteristics of virtualization.
- c) Define virtual machine (VM).
- d) List types of SLA (Service Level Agreement)
- e) What is ubiquitous computing? Give two examples of cloud based ubiquitous computing.
- f) List the types of cloud risks.
- g) Compare GFS and HDFS. (Write any two points)

P.T.O.

- 2. Attempt any THREE of the following: 12**
- a) Explain the IaaS cloud service model. Write it's two advantages.
  - b) Explain how virtualization provides improved productivity and operational efficiency.
  - c) Explain cloud storage system architecture.
  - d) Compare server side and client side encryption. (Write any four points)
- 3. Attempt any THREE of the following: 12**
- a) List the characteristics and features of Google App Engine.
  - b) Suggest any four best practices for cloud IAM.
  - c) Describe the four characteristics and list two advantages and two disadvantages of Google file system (GFS).
  - d) Explain the Xen Architecture with a neat diagram.
- 4. Attempt any THREE of the following: 12**
- a) What is VM Migration? Also explain VM management.
  - b) Explain an architecture of federated cloud computing with its model.
  - c) Explain identity management and access facility in cloud computing.
  - d) Describe any application developed with help of ZigBee technology.
  - e) Explain ECG Analysis in cloud and its access.
- 5. Attempt any TWO of the following: 12**
- a) Explain SLA management phases in detail.
  - b) List any four advantages and disadvantages of virtualization.
  - c) Explain the cloud cost benefits in detail.
- 6. Attempt any TWO of the following: 12**
- a) Explain the Multi-tenancy, data outsourcing and meta data security in clouds.
  - b) Explain benefits of cloud platforms like Amazon EC2 and S3.
  - c) Compare the various cloud delivery models based on their characteristics. (Write any six points)
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