

BT-8/M-24

48357

**CLOUD COMPUTING**

Paper-PE-IT-A404A

Time Allowed : 3 Hours]

[Maximum Marks : 75

**Note** : Attempt five questions in all, selecting at least one question from each Unit. All questions carry equal marks.

**UNIT-I**

1. (a) By taking some practical examples, discuss and validate the basic role of Business drivers for adopting cloud computing. 8
- (b) Differentiate between Grid computing and Distributed computing. Justify the roles of using the open standards in the Cloud Computing Industry. 7
2. (a) With the help of its structural diagram, explain the NIST model of Cloud computing environment. Also, highlights its pros and cons. 8
- (b) Name one popular cloud service platform provider that offers a range of Cloud computing application services and briefly describe its core services. 7

## UNIT-II

3. (a) Explain, in simple terms, the role of Cloud computing protocols, Community cloud and Hybrid cloud by taking some real time practical examples. 8
- (b) What are the basic benefits of using Cloud computing stack? Substantiate the role of every stack layer in cloud computing. 7
4. (a) Discuss the architectural models and their design mock-ups of Cloud Computing Architecture and Traditional Client-server Computing Architecture. 8
- (b) Explain the various vital characteristic of Infrastructure as a Service (IaaS) model and Software as a Service (SaaS) model. 7

## UNIT-III

5. (a) Could you provide a brief overview of a Real-world use case where an organization successfully implemented Microsoft Azure for its cloud computing needs? Highlight the key benefits of using this specialized Platform service. 8
- (b) Explain the role of large scale processing for data which can be effectively used for Cloud computing? 7



6. (a) Identify the purpose of using Scalability. How does scalability play a key role in cloud services, and why is it beneficial for Businesses using Cloud computing? 8
- (b) How does Cloud computing accounting and billing typically work? Also, discuss the various economic aspects of scaling in Cloud computing. 7

#### UNIT-IV

7. (a) Explain and justify the roles of the following : 8
- (i) Host Level Security
  - (ii) Application Level Security
  - (iii) Network Level Security.
- (b) Explain common Data privacy and Security concerns that organizations should address when implementing cloud computing services, and why is it important to alleviate these concerns? 7
8. (a) What is authentication in Cloud security, and why is it a critical component for ensuring the security of cloud-based systems and data? 8
- (b) Identify the major jurisdictional issues which are raised by data location in cloud security? 7