7E4237

B. Tech. VII Semester (Main) Examination 2015
COMPUTER ENGINEERING # 7CS0 # MODEL PAPER

CLOUD COMPUTING

Time : 3 Hours | Min. Passing Marks : 24 | Maximum Marks : 80

Instruction to Candidates :
Attempt any five questions, selecting one question from each unit. All questions carry equal marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.)

Unit-'I'

1. (a) Discuss ethical issues in cloud computing ? [8]

   (b) What are the characteristics of cloud computing? Explain in detail [8]

OR

1. (a) Write short notes on historical development of cloud computing. [8]

   (b) What do you understand by the term 'cloud computing'? How it is evolved ? [8]

Unit-'II'

2. (a) Discuss parallel or distributed computing paradigm using MapReduce and Hadoop. [8]

   (b) Discuss the generic cloud architecture with neat diagram. [8]

OR

2. (a) Discuss layers and types of cloud with reference to cloud computing. [8]

   (b) Write short notes on high level language for cloud and developing applications. [8]

Unit-'III'

3. (a) What is datacenter virtualization? What are the various benefits of it? [8]

   (b) Explain the followings:

   (i) Operating system-level virtualization

   (ii) Programming language-level virtualization

   (iii) Application-level virtualization [8]

OR

3. (a) Why virtualization has gained so much popularity

in the context of cloud computing? Discuss the various phenomenons behind its gaining importance? [8]

   (b) Discuss the followings:

   (i) Xen Virtualization Technology

   (ii) VMware: full virtualization [8]

Unit-'IV'

4. (a) What are various ways to mitigate risks to cloud computing security? Explain. [8]

   (b) Write short notes on security policy implementation. [8]

OR

4. (a) What are CIA triad of information system security? Explain. [8]

   (b) Write short notes on trusted cloud computing. [8]

Unit-'V'

5. (a) Write short notes on third party services in cloud computing. [8]

   (b) What are various scientific applications of cloud computing ? [8]

OR

5. (a) Write an overview of the Aneka framework with reference to cloud computing platform. [8]

   (b) Write short notes on the followings: (any two)

   (i) Protein Structure Prediction

   (ii) Gene expression data analysis for cancer diagnosis

   (iii) Satellite image processing [4×2 = 8]