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]