Roll No. ..... Total Pages : 03

MCA/D-18 10144

CLOUD COMPUTING

MCA14-55(V)

Time : Three Hours] [Maximum Marks : 80

Note : Attempt *Five* questions in all. Q. No. 1 is compulsory. Attempt *four* more questions selecting *one* question from each Unit.

1. Answer the following questions in brief : 4×4=16
   (a) Explain different precursors to cloud computing.
   (b) Explain content delivery services in brief.
   (c) Explain the following in Python with suitable examples : 'range', 'pass', 'in' and 'is'.
   (d) Explain recursion in Python with an example.

Unit I

2. (a) Define cloud computing. Explain main characteristics of cloud computer. 8
   (b) What is Virtualization ? Explain benefits and limitations of virtualization. 8

3. (a) Explain any *two* virtualization technologies in detail. 8

(b) Explain the following virtualization : 8
(i) Operating system (ii) Platform.

Unit II

4. (a) What is queuing service ? Explain any *two* queuing services. 8

(b) What is deployment and management service ? Explain any *one* such service in detail. 8

5. (a) What is e-mail service ? Explain any *one* e-mail service. 8

(b) What is Multimedia Cloud Computing (MCC) ? Explain different types of streaming protocols used in MCC. 8

Unit III

6. (a) What is List in Python ? Explain any *three* methods associated with list by giving examples. 8

(b) What is Dictionary in Python ? Explain any *three* methods associated with Dictionary with examples. 8

7. (a) How can you read and write files in Python ? Explain with an example. 8

(b) How can you create class and objects in Python ? Explain with an example. 8

Unit IV

8. (a) What is lambda function in Python ? Explain its use by giving two different examples. 8

(b) Distinguish between iterators and generator in Python. Give one example of each. 8

9. Write short notes on the following packages : 8,8

(a) Django (b) Numpy.