



- Notes :
1. All questions carry marks as indicated.
 2. Solve Question 1 OR Questions No. 2.
 3. Solve Question 3 OR Questions No. 4.
 4. Solve Question 5 OR Questions No. 6.
 5. Solve Question 7 OR Questions No. 8.
 6. Solve Question 9 OR Questions No. 10.
 7. Solve Question 11 OR Questions No. 12.
 8. Assume suitable data whenever necessary.
 9. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) What is Cloud? Explain the advantages and disadvantages of cloud computing. **6**

b) Discuss the different legal issues when using cloud model? **7**

OR

2. a) Give the difference between cloud computing, cluster computing and grid computing. **6**

b) List and explain challenges in cloud computing. **7**

3. a) Explain cloud computing Architecture and cloud components. **7**

b) Explain deployment models in cloud computing? **7**

OR

4. a) Enlist and explain three services models of cloud computing. **7**

b) What is the role of network in cloud? and explain protocol used in cloud? **7**

5. a) What is big data? Explain the characteristics of big data? **6**

b) Why do we need Hadoop? What is the basic difference between RDBMS and Hadoop. **7**

OR

6. a) What is MapReduce? Explain three stages of MapReduce program execution **7**

b) List and explain the steps of Hadoop configuration? **6**

7. a) Explain security concerns in cloud computing? **6**

b) Explain Data security and Application security in cloud computing? **7**

OR

8. a) Enlist and explain different technologies for data security in cloud computing? 6
b) What is Authentication and Authorization in cloud computing? 7
9. a) What is ADO.NET? Explain it's Architecture in detail. 7
b) Write a program in C# to design. calculator as console based application? 7

OR

10. a) List and explain the features of C#. NET? 7
b) What is Dataset in C#? How to declare Dataset in C#? Explain the important property of Dataset? 7
11. a) Discuss development Facilities in Azure cloud. 7
b) Compare windows Azure table storage and SQL database. 6

OR

12. a) Explain Microsoft Azure life cycle in details. 6
b) Explain how Azure maximizes data availability and Minimizes security risk. 7
