



BRAINWARE UNIVERSITY

Course – MCA

Cloud Computing (MCA404C)

(Semester – 4)

Time allotted: 3 Hours

Full Marks : 70

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group –A

(Multiple Choice Type Questions)

10 x 1 = 10

1. *Choose the correct alternative from the following*

(i) Correct order to import hadoop in java base

- | | |
|----------------------|---------------|
| a. org.apache.hadoop | b. org.hadoop |
| c. org.hadoop.apache | d. hadoop.* |

(ii) How does pagerank algorithm helps Google?

- | | |
|------------|---|
| a. Storage | b. IaaS |
| c. PaaS | d. Determine the importance of a particular page. |

(iii) Which of the following is/are a deployment model?

- | | |
|-----------|-----------------|
| a. Public | b. Private |
| c. Hybrid | d. All of these |

(iv) What is the need of reducer in apache Hadoop?

- | | |
|----------------------|------------|
| a. A framework | b. storage |
| c. Cloud data center | d. PaaS |

- (v) What is amazon aws?
- a. Cloud Service
 - b. Programming language
 - c. Operating System
 - d. Database server
- (vi) What is the full form of HDFS?
- a. Hadoop Database File System
 - b. Hadoop Distributed File System
 - c. Hadoop Data File System
 - d. Hadoop Data For service
- (vii) What is the need of mapper in apache Hadoop?
- a. A framework
 - b. IaaS
 - c. Cloud vendor
 - d. SaaS
- (viii) What is the full form of SOA?
- a. Software Of Analysis
 - b. Service Of Access
 - c. Service Oriented Architecture
 - d. Software Oriented Architecture
- (ix) How we can protect a password over cloud?
- a. By hashed password
 - b. By user access
 - c. By cloud service model
 - d. IaaS
- (x) What is the reducer in apache Hadoop?
- a. Disk space
 - b. HDFS
 - c. Framework
 - d. Function

Group – B

(Short Answer Type Questions)

3 x 5 = 15

Answer any *three* from the following

2. What is PaaS? Explain the architecture of PaaS. [5]
3. How resource allocation can be maintained in cloud computing? [5]
4. How data can be protected in cloud computing to ensure data security? [5]
5. What is Hadoop distributed file system architecture? [5]
6. What do you mean by virtualization in cloud computing? [5]

Group – C

(Long Answer Type Questions)

3 x 15 = 45

Answer any *three* from the following

7. (a) Briefly explain the inter cloud resource management techniques. [10]
(b) What are the different cooling techniques available for cloud data centers? [5]
8. (a) Write a structure of map and reduce in a big data file with an example. [10]
(b) Discuss the difference between cloud computing and virtualization. [5]
9. (a) What do you mean by two level resource allocation techniques? [5]
(b) Write down the architectural design of DAS,SAN and NAS. [10]
10. (a) Write a structure of Apache Hadoop mapreduce with a data set. [8]
(b) Discuss in brief about the HDFS. [7]
11. (a) What do you mean by cloud trust management? [5]
(b) Write down the architectural design of different cloud storage models. [10]