D

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

FIRST SEMESTER M.TECH DEGREE EXAMINATION

Computer Science and Engineering

(Computer Science and Systems Engineering)

04 CS 6407 DISTRIBUTED SYSTEMS AND ADVANCED COMPUTING

Max Marks: 60 Duration: 3 Hrs

Part A (Answer All, Each Carrying 03 Marks)

1. With suitable example explain the need for distributed systems.

2. Distinguish between HADOOP and database management system.

3. What are the different components of a Hadoop node.

4. List and explain the various functions used for input and output in map-reduce programs?

5.Compare Iaas,Paas and SaaS with respect to composability characteristics.

6. Demonstrate the use of single physical interfaces for preparing network in Dev stack.

7.Write note on the features of open stack networking.

8. Justify the need of Glance in Open Stack.

[03 X 08=24 Marks]

Part B (Answer All, Each Carrying 06 Marks)

9. Compare the various distributed systems which can be used to implement the networked systems in various enterprises.

OR

10. Explain the concept of Remote Method Invocation. Create a program structure to implement JavaRMI.

11. Compare the various components in Hadoop eco system.

OR

12. Illustrate with examples/commands various concepts involved in working of HDFS.

13. What are the various steps involved in processing a job inside Hadoop.

OR

14. Demonstrate with example the working of map-reduce in hadoop.

15. An event log analyzer program requires identifying the number of occurrence of the word “SYSTEM” from its event files. Develop an algorithm using any advanced computing concept to simplify the process.

OR

16. Compare the various types of cloud infrastructure. Point out the merits and demerits of the same.

17. Explain the concepts associated with using Infrastructure as Services.

OR

18. What are the characteristics involved in developing Software as Services. With necessary diagrams explain the implementation of SaaS based on SOA components.

19. Explain with necessary commands, the creation of various networks with neutron.

OR

20. How can you authenticate and authorize users and services in the Open Stack cloud ? Justify with necessary examples.