

**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 Hours

**PART A**

*Answer All Questions*

*Each question carries 3 marks*

1. Debate on role of middleware in a distributed system.
2. Clarify the steps involved in block creation and Data Replication in HDFS.
3. Remark on different components of a Hadoop Node?
4. Discriminate between block and split.
5. Write about SaaS.
6. What are flavors?
7. Describe major Open Stack components.
8. Justify the need of Keystone.

**PART B**

*Each question carries 6 marks*

9. Clarify the concept of Distributed Object and Method Invocation.  
OR
10. Discriminate on consistency and replication in distributed systems.
11. Demonstrate with examples various concepts involved in working of HDFS.  
OR
12. Illustrate the need for Hadoop with proper example.
13. Discuss the steps involved in job processing inside Hadoop.  
OR
14. Sketch a detailed note on Hadoop Architecture with its functioning.
15. Differentiate between Private, Pubic and Community cloud.  
OR
16. Detail about various Input Formats in Hadoop.
17. Analyze the merits and demerits of Platform as Services and Software as services.  
OR
18. Describe the use IaaS, PaaS and SaaS with based on its applications.
19. Comment on Compute service project of Open stack. Justify the importance of it in Open stack.  
OR
20. Demonstrate the creation of various networks with neutron.