

Roll No.:

SGT UNIVERSITY

END TERM THEORY EXAMINATION JULY-2022

Faculty/College of Study:	Engineering & Technology	Year/Semester:	6 th Semester
Program:	BCA (CC)	Duration:	03:00 Hrs
Course/Subject:	Hadoop	Maximum Marks:	60
Course/Subject Code:	13450602	Batch:	2019

Instructions:-

1. Write Your Roll No. on the Question Paper.
2. Candidate should ensure that they have been provided correct question paper. Complaint(s) in this regard, if any should be made within 15 minutes of the commencement of the exam. No complaint(s) will be entertained thereafter.
3. All Questions are compulsory. Marks are indicated against each question.
4. Illustrate your answer with diagram wherever required.

SECTION-A

(Very Short Answer Type Questions)

Note: All Questions are compulsory: -

[12X1=12 Marks]

S. No.	Question	Marks Allotted
1	What is HDFS?	1
2	What is Writable interface in Java?	1
3	What is Secondary NameNode?	1
4	What is a data structure in Java?	1
5	What is a Pig Script interface?	1
6	What is a wrapper class in Java?	1
7	What is DataNode?	1
8	What is MapReduce?	1
9	What is WritableComparable in MapReduce?	1
10	What is NameNode?	1
11	What is serialization in Java?	1
12	What is Pig Latin?	1

SECTION-B
(Short Answer Type Questions)

Note: All Questions are compulsory: -

[4X2=8 Marks]

S. No.	Question	Marks Allotted
13	What is a Linked List in Java? Explain with example.	2
14	Differentiate between Job Tracker and Task Tracker.	2
15	Write 2 differences between Pig and MapReduce.	2
16	Explain implementing a RawComparator in Java.	2

SECTION-C
(Descriptive Answer Type Questions)

Note: All Questions are compulsory: -

[4X4=16 Marks]

S. No.	Question	Marks Allotted
17	Explain in detail the three modes of a Hadoop cluster.	4
18	Differentiate between the local and distributed modes of Apache Pig.	4
19	What is BytesWritable, NullWritable, ObjectWritable and GenericWritable?	4
20	What are Stacks, Queues, Sets, and Maps in Java?	4

SECTION-D
(Long Answer Type Questions)

Note: All Questions are compulsory: -

[4X6=24 Marks]

S. No.	Question	Marks Allotted
21	What is Pig? Explain in detail the architecture of Pig with diagram.	6
22	Write the Hadoop Wordcount program and explain it with an example.	6
23	What are generics and generic classes? Explain how to implement generic types.	6
24	Explain the HDFS architecture in detail with diagram.	6