

Mid Semester Examination 2021

Name of the Program: B.Tech. CSE-DS
Name of the Course: **Hadoop Fundamentals**

Semester: 4th
Course Code: **TCS-432**

Time: 1-1/2 Hour

Maximum Marks: 50

Note:

- (i) Answer **all** the questions by choosing **any one of the sub questions**.
- (ii) Each question carries 10 marks

Q1	(10 marks)	
(a)	Explain structured, semi-structured and unstructured data with suitable examples.	CO1
	OR	
(b)	What are the major challenges associated with Big Data?	
Q2	(10 marks)	
(a)	Explain the characteristics of Big Data (5 'V').	CO1 and CO2
	OR	
(b)	What are the key tools involved in Big Data eco-system?	
Q3	(10 marks)	
(a)	Explain Hadoop distributed file system (HDFS).	CO2
	OR	
(b)	How, Hadoop framework makes the whole system fault-tolerance?	
Q4	(10 marks)	
(a)	Write the MapReduce code for "word-count".	CO2 and CO3
	OR	
(b)	What are the different file input format permissible in Hadoop?	
Q5	(10 marks)	
(a)	Describe the combiner, and the conditions associated with combiner.	CO3
	OR	
(b)	Differentiate between Wrapper classes and Box classes (in Hadoop).	