

S.No. : 75

BCADS 1401

No. of Printed Pages : 03

Following Paper ID and Roll No. to be filled in your Answer Book.

**PAPER ID : 15812**

Roll  
No.

1	2	2	0	2	5	8	0	8	2
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## BCA Examination 2023-24

(Even Semester)

### BIG DATA FUNDAMENTALS

*Time : Three Hours]*

*[Maximum Marks : 60*

**Note :-** Attempt all questions.

#### SECTION - A

1. Attempt all parts of the following :  $8 \times 1 = 8$

- What is Big data and explain its types?
- Write 4V's in big data.
- What is the shell name of Pig?
- What is the role of Oozie in hadoop?
- Write the main between Haddop 1.X and Hadoop 2.X.

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- (f) Write any two advantages of hive.
- (g) What is hadoop cluster and explain its types?
- (h) What are the advantages of Apache Pig?

### **SECTION – B**

2. Attempt any two parts of the following :  $2 \times 6 = 12$
- (a) Explain with an example how word count job is process in map reduce.
  - (b) How can big data be used to address societal challenges, such as healthcare, education and climate change?
  - (c) What are the different security services in HDP?
  - (d) Explain data analytics with its types in brief.

### **SECTION – C**

**Note :-** Attempt all questions. Attempt any two parts from each questions.  $8 \times 5 = 40$

3. (a) What is RDBMS? Explain different types of SQL commands with examples.
- (b) Describe the working of name node and data node in HDFS architecture.

- (c) Explain the evolution and history of hadoop.
- 4. (a) Explain the Hortonworks data platform in brief.  
(b) Differentiate between relational database and Hbase.  
(c) Explain the purpose of apache ambari in the HDP.
- 5. (a) Describe hive architecture with its components.  
(b) Explain the functionality of Pig and Oozie in Hadoop.  
(c) What is Sqoop? Why we need scoop in hadoop? By default, how many mappers are working in scoop.
- 6. (a) Explain the nature and purpose of Apache Spark. What is the role of RDD in Spark?  
(b) Explain any five commands of linux with examples.  
(c) Explain YARN architecture and how hadoop runs a map reduce job using YARN.

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