**POORNIMA UNIVERSITY, JAIPUR**

**END SEMESTER EXAMINATION, November 2022**

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|  | **3BC5162** | Roll No. | Total Printed Pages: 2 |
| **3BC5162** |  |
| BCA III Year V-Semester (Main/Back) End Semester Examination, November 2022  **(DS)** | |
| **BCD05102 : Big Data Analytics** | | | |

# Time: **3**Hours. Total Marks: **60**

Min. Passing Marks: **21**

Attempt **five** questions selecting one question from each Unit. There is internal choice from Unit I to Unit V. Marks of each question or its parts are indicated against each question / parts. Draw neat sketches wherever necessary to illustrate the answer. Assume missing data suitably (if any) and clearly indicate the same in the answer.

Use of following supporting material is permitted during examination for this subject.

# **1.--------------------------Nil--------------------** **2.------------------Nil-----------------------**

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|  |  | **UNIT-I (CO1)** | **Marks** | **Bloom Level** |
| **Q.1** | **(a)** | Analysis Big Data? Categories them with its real application? Discussed in terms of the three V’s in big data? | **(6)** | **Create** |
|  |  |  |  |  |
|  | **(b)** | Apply different 4 configuration files in Hadoop defined with the use of these? Summarize the important features of Hadoop? | **(6)** | **Understand** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.2** | **(a)** | Understand the Hadoop Input Output System briefly? Analytics the effects of Big Data in our society? | **(6)** | **Evalute** |
|  |  |  |  |  |
|  | **(b)** | Name various Hadoop and YARN daemons and use and what we understand the Hadoop Input Output System briefly? | **(6)** | **Apply** |
|  |  |  |  |  |
|  |  | **UNIT-II (CO2)** |  |  |
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| **Q.3** | **(a)** | “Big data is a term for data sets that are so large or complex that traditional data processing applications”. explain the statement | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | What is the difference between an RDBMS and Hadoop? | **(6)** | **Remember** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
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| **Q.4** | **(a)** | How can big data analytics benefit business? What are some of the challenges that come with a big data project? | **(6)** | **Analysis** |
|  |  |  |  |  |
|  | **(b)** | What is rack awareness in Hadoop clusters, Hadoop protect data against unauthorized access? | **(6)** | **Apply** |
|  |  |  |  |  |
|  |  | **UNIT-III (CO3)** |  |  |
|  |  |  |  |  |
| **Q.5** | **(a)** | What you means by reducer () in big data concept? How many type and use to define the difference between them? | **(6)** | **Remember** |
|  |  |  |  |  |
|  | **(b)** | What are the key steps in deploying a big data platform? Why is Hadoop so popular in big data analytics? | **(6)** | **Understand** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.6** | **(a)** | What is HDFS and what are its main components? Define and describe the term FSCK? | **(6)** | **Evalutae** |
|  |  |  |  |  |
|  | **(b)** | What are three common input formats in Hadoop? Define HDFS and YARN, and talk about their respective components? | **(6)** | **Apply** |
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|  |  | **UNIT-IV (CO4)** |  |  |
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| **Q.7** |  | What are the key components of HBase? Explain with examples? | **(12)** | **Analysis** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.8** | **(a)** | Define the Port Numbers for NameNode, Task Tracker and Job Tracker. What are some of the data management tools used with Edge Nodes in Hadoop? | **(6)** | **Apply** |
|  |  |  |  |  |
|  | **(b)** | What is the purpose of the JPS command in Hadoop? Name the different commands for starting up and shutting down Hadoop Daemons. | **(6)** | **Understand** |
|  |  |  |  |  |
|  |  | **UNITV (CO5)** |  |  |
|  |  |  |  |  |
| **Q.9** | **(a)** | What do we understand the big data analysis? Elaborate on real-world examples of the Big Data Life Cycle? | **(6)** | **Evaluate** |
|  |  |  |  |  |
|  | **(b)** | Analytics the effects of machine learning in our society? Compare big SQL and SQL with examples? | **(6)** | **Create** |
|  |  |  |  |  |
|  |  | **OR** |  |  |
|  |  |  |  |  |
| **Q.10** | **(a)** | What are the key differences between Hadoop and Spark? | **(6)** | **Understand** |
|  |  |  |  |  |
|  | **(b)** | **What is a Random Forest? How do you build and evaluate a Random Forest in R?** | **(6)** | **Create** |