PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BCA DEGREE EXAMINATION MAY 2024
(Sixth Semester)

Branch – COMPUTER APPLICATIONS

BIG DATA ANALYTICS

Time: Three Hours   Maximum: 50 Marks

SECTION-A (5 Marks)
Answer ALL questions
ALL questions carry EQUAL marks   (5 x 1 = 5)

1   What is the primary purpose of capturing data in Big Data analytics?
    (i) Real -time processing   (ii) Storage optimization
    (iii) Analysis and insights   (iv) Data encryption

2   Which programming language is commonly used for data analysis in the Hadoop ecosystem?
    (i) Java   (ii) Python
    (iii) C++   (iv) Lua Programming Language

3   Which of the following platforms does Apache Hadoop run on ?
    (i)   Bare metal   (ii) Unix-like
    (iii) Cross-platform   (iv) Debian

4   Which is a Cassandra Feature that optimizes the cluster consistency process?
    (i)   Hinted tomb   (ii) Tombstone
    (iii) Hinted Handon   (iv) Hinted Handoff

5   Identify the results of a Hive Query can be stored as
    (i) Local File   (ii) HDFS File
    (iii) Both as the Local File and HDFS file   (iv) Can not be stored

SECTION - B (15 Marks)
Answer ALL Questions
ALL Questions Carry EQUAL Marks   (5 x 3 = 15)

6   a. List the technology challenges for big data.
                            OR
    b. Outline standard Big Data architecture with example.

7   a. State the classification of big data analytics.
                            OR
    b. Describe Hadoop in big data.

8   a. Compare RDBMS with HADOOP in big data analytics.
                            OR
    b. What is Mongo DB and state its uses ?

9   a. Explain the roles of Mapper, Reducer, and Combiner in the Hadoop MapReduce framework.

OR

     b. Classify the features of Cassandra.

10 a. Narrate the anatomy of Pig.

OR

     b. Bring out hive file formats and write its application.

SECTION -C (30 Marks)
Answer ALL questions
ALL questions carry EQUAL Marks   (5 x 6 = 30)

11 a. Discuss about the applications of Big Data.

OR

     b. Explain M2M communication with a neat sketch.

12 a. Explain the terminologies used in Big Data Environment and give the challenges in Big Data Analytics

OR

     b. Elucidate NoSql technology and its features

13 a. Point out how to process data with Hadoop.

OR

     b. Enumerate the data types in Mongo DB.

14 a. Elucidate the benefits of Mapreduce technique in Big Data Analytics

OR

     b. Explain about the CQLSH in Cassandra.

15 a. Compare the Retail Log Processing.

OR

     b. Classify the Pig on Hadoop in detail.

Z-Z-Z   END