

(FOR THE CANDIDATES ADMITTED  
DURING THE ACADEMIC YEAR 2021-2023 ONLY)

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REG.NO.

**N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI**

**END-OF-SEMESTER EXAMINATIONS : MAY – 2023**

**B.Sc. – COMPUTER TECHNOLOGY**

**MAXIMUM MARKS: 70**

**SEMESTER - IV**

**TIME : 3 HOURS**

**PART – III**

**BIG DATA MANAGEMENT**

**SECTION – A**

**(10 X 1 = 10 MARKS )**

**ANSWER THE FOLLOWING QUESTIONS.**

**(K1)**

**MULTIPLE CHOICE QUESTIONS.**

1. \_\_\_\_\_ refers to data that has a defined length and format.
  - a) Tuple
  - b) Structured Data
  - c) Unstructured Data
  - d) File
2. \_\_\_\_\_ environment may share resources ranging from memory to network and storage.
  - a) Big data
  - b) Parallel processing
  - c) Distributed Computing
  - d) Multiprocessing
3. \_\_\_\_\_ separates resources and services from the underlying physical delivery environment, enabling us to create many virtual systems within a single physical system.
  - a) Virtualization
  - b) Big data analytics
  - c) Distributed computing
  - d) Cloud computing
4. \_\_\_\_\_ in functional languages does not modify the structure of the data.
  - a) Data
  - b) Variable
  - c) Images
  - d) Operators
5. \_\_\_\_\_ is the process of analyzing unstructured text, extracting relevant information, and transforming it into structured information that can then be leveraged in various ways.
  - a) Field
  - b) Text Analytics
  - c) Image Analytics
  - d) Video Analytics

**ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES.**

**(K2)**

6. List the shared characteristics of Big Data.
7. Define Latency.

8. What is data virtualization?
9. Write a Map function to identify the input data.
10. List any two unstructured data.

**SECTION – B**

**(5 X 4 = 20 MARKS)**

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.**

11. a) Describe the waves of managing data.

**(OR)**

- b) How will you integrate data types into a big data environment?
12. a) What are the Data Services and organizing tools in big data?

**(OR)**

- b) Write short notes on big data analytics.
13. a) Describe the concept of MongoDB

**(OR)**

- b) Sketch the Hbase columnar database.
14. a) Trace the origins of Map reduce.

**(OR)**

- b) How will you add reduce function?
15. a) Describe the Characteristics of big data analysis

**(OR)**

- b) Show the characteristics of a big data analysis framework.

**SECTION – C**

**(4 X 10 = 40 MARKS)**

**ANSWER ANY FOUR OUT OF SIX QUESTIONS.**

**(K4/K5)**

**(16th QUESTION IS COMPULSORY AND ANSWER ANY THREE QUESTIONS:**

16. How will you build a successful Big Data Management Architecture?
17. How will you define an unstructured data? Explain.
18. Discuss the redundant physical and security infrastructure layer in detail.
19. Explain the server virtualization and application virtualization in detail.
20. How will you putting map and reduce together? Explain
21. Discuss the Analysis and Extraction Techniques.