(For candidates admitted from 2016–2021 Batch)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2023.

Computer Science/Information Technology — Elective

BIG DATA ANALYTICS

Time: Three hours Maximum: 75 marks

PART A — $(10 \times 2 = 20)$

Answer ALL questions.

- 1. What is Semi-Structured Data?
- 2. Define big data
- 3. List out the need of big data Analytics
- 4. What is mean by Data Science?
- 5. Write about NewSQL.
- 6. List out the characteristics of MongoDB.
- 7. Define Hadoop.
- 8. List the components of Hadoop.

- 9. Define YARN.
- 10. What is meant by Data Serialization?

PART B —
$$(5 \times 5 = 25)$$

Answer ALL the questions, choosing either (a) or (b)

11. (a) Write about Unstructured data in digital data.

Or

- (b) Describe about characteristics of Big data.
- 12. (a) Discuss about technology expertise in Data Science.

Or

- (b) Explain about classification of analytics in big data.
- 13. (a) Write short on NoSQL and its Types.

Or

- (b) Explain the concepts of Apache Cassandra.
- 14. (a) What are the key components available in Hadoop? Explain.

Or

(b) Discuss about concept of HSFS in Hadoop.

15. (a) Explain about Map ;educe application with neat diagram.

Or

(b) How to working with common serialization formats? Explain.

PART C —
$$(3 \times 10 = 30)$$

Answer any THREE questions.

- 16. Differentiate data environment and big data environment.
- 17. Discuss in detail about basic terminologies in data environment
- 18. Explain about features of Cassandra in detail.
- 19. Illustrate the concepts of Hadoop ecosystem
- 20. Describe about storage formats in Big data serialization.