

B.Tech. DEGREE EXAMINATION, JUNE 2023
End Semester examination
Sixth Semester
INTRODUCTION TO DATA SCIENCE AND ANALYTICS
ECE
(RU 19 Regulations)

Time : 3 Hours

Max. Marks : 70

PART — A

(Compulsory question)

(10 × 2 = 20 Marks)

1. Answer the following
- (a) What is Big Data?
 - (b) What are Data Analytics?
 - (c) What are the Analytics architecture components and Design styles?
 - (d) What are the Design styles of big data?
 - (e) Distinguish between Document Databases and Graph databases.
 - (f) What is Data Base?
 - (g) What are the features of Django.
 - (h) Write a short notes on web frame work.
 - (i) What is the role of Monte Carlo simulation?
 - (j) Write a short notes on big data job opportunities.

PART — B

Answer ONE full question from each Unit. (5 × 10 = 50 Marks)

ALL questions carry equal marks.

UNIT I

2. (a) Briefly Mapping analytics flow to big data stack.
(b) Explain the Analytics patterns.

Or

3. What are some domain specific examples of big data?

Turn Over

UNIT II

4. (a) Discuss about Hortonworks data platform.
(b) Explain about Azure HD Insight.

Or

5. What is Amazon Elastic Map Reduce and its applications.

UNIT III

6. Draw and explain The MapReduce patterns.

Or

7. Explain about the Key-Value Databases and Document Databases.

UNIT IV

8. Explain about Relational databases and Non Relational Databases.

Or

9. Discuss Django Architecture.

UNIT V

10. What are the key steps in deploying a big data platform?

Or

11. How do you see yourself fit for the role of data scientist in our company?
