

Hall Ticket No

--	--	--	--	--	--	--	--	--	--

Question Paper Code: BCS212



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

M.Tech I Semester End Examinations (Regular) - February, 2017

Regulation: IARE-R16

BIG DATA ANALYTICS

(Computer Science and Engineering)

Time: 3 Hours

Max Marks: 70

Answer ONE Question from each Unit

All Questions Carry Equal Marks

All parts of the question must be answered in one place only

UNIT – I

1. (a) What is big data analytics? What are the challenges facing big data? [7M]
- (b) Describe CAP theorem with illustration. [7M]
2. (a) Discuss the elements of big data justifying your answer with example of each element. [8M]
- (b) List the differences between parallel and distributed systems. [6M]

UNIT – II

3. (a) Explain the analytic process with illustration. [8M]
- (b) SAS is an information delivery system which enables transformations of datasets into useful information which helps in taking important decisions. Justify the statement defining various features of SAS. [6M]
4. (a) An organization often requires both reporting and analysis to explore new business insights for big data. State the importance of reporting and analysis. How does both differentiate? [8M]
- (b) Define text data analysis. Show some examples of data sources with different data structures types used in text data analysis. [6M]

UNIT – III

5. (a) List and describe the main features of MapReduce. [8M]
- (b) Describe HDFS architecture with illustration. [6M]
6. (a) Write a short note on Hadoop ecosystem. [5M]
- (b) What is metadata? What information does it provide? [4M]
- (c) Discuss the concept of regions in HBase. [5M]

UNIT – IV

7. (a) What is NoSQL? State the features of NoSQL. Why is NoSQL preferred in case of big data? [8M]
(b) Write short notes on NameNode and DataNode illustrating the communication between both the Nodes. [6M]
8. (a) What is Hadoop? What are the components of Hadoop? Explain High Level architecture of Hadoop. [8M]
(b) Write a brief description on the anatomy of File Read. [6M]

UNIT – V

9. (a) Describe the key elements of social media. [8M]
(b) What is mobile analytics? Differentiate between mobile analytics and web analytics. [6M]
10. (a) What do you understand by sentiment analysis? [6M]
(b) What are the types of application considered for mobile analytics? Explain. [8M]