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Question Paper Code: BCS212



INSTITUTE OF AERONAUTICAL ENGINEERING
(Autonomous)

M.Tech I Semester End Examinations (Supplementary) - January, 2019

Regulation: IARE-R16

BIG DATA ANALYTICS

Time: 3 Hours

(CSE)

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 are structured and unstructured data? Describe the challenges associated with unstructured data. [7M]
- (b) Why is big data analytics important? Justify your answer. [7M]
2. (a) Differentiate between descriptive and predictive analytics with an example. [7M]
- (b) What is distributed computing? Explain the working of a distributed environment with its layered architecture. [7M]

UNIT – II

3. (a) What are the different phases of analytical process? Illustrate by defining each phase. [7M]
- (b) An analyst is given choice of two analytical tools R, IBM SPSS and SAS. She needs to select one tool. What are the different features to be compared? In your understanding which one will be selected by her and why? [7M]
4. (a) What do you mean by basic analytics? Provide three examples of techniques to be followed during basic analytics. [7M]
- (b) Describe reporting and analysis briefly in context with big data analytics to improve the business. [7M]

UNIT – III

5. (a) Discuss three categories of techniques to optimize MapReduce jobs with an example. [7M]
- (b) What is HBase? Describe role of HBase in data processing. [7M]
6. (a) How does Hadoop Distributed File System(HDFS) ensure data integrity in a Hadoop cluster? [7M]
- (b) Discuss the points to be considered while designing a file system in MapReduce. [7M]

UNIT – IV

7. (a) What is NoSQL? State the features of NoSQL. What are the advantages of NoSQL? [7M]
(b) Write short notes on NameNode and DataNode illustrating the communication between both the Nodes. [7M]
8. (a) What is Hadoop? State the features of Hadoop. What are the advantages of using Hadoop?[7M]
(b) Write a brief description on the anatomy of File Write and replica processing of data with Hadoop. [7M]

UNIT – V

9. (a) What is social media? Describe the different categories of social media. [7M]
(b) What is mobile analytics? What are the key challenges of mobile analytics? [7M]
10. (a) List and define common online tools used to perform sentiment analysis with example. [7M]
(b) Name some commonly used text mining software and explain open mining on Tweets. [7M]