



# P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belagavi)

**Seventh Semester, B.E. - Computer Science and Engineering**

**Semester End Examination; Dec. - 2019**

**Managing Big Data**

*Time: 3 hrs*

*Max. Marks: 100*

*Note: Answer FIVE full questions, selecting ONE full question from each unit.*

### UNIT - I

- 1.a Bring out the analytical approaches of big data and also explain advantages of big data analytics. 10
- b. List and explain technical skills and soft skills required for big data developer. 10
- 2.a Discuss some areas in which decision making processes are influenced by social network data. 10
- b. Justify how common types of financial frauds prevalent in the current business scenario and also explain in what ways analyzing big data helps organization prevent fraud? 10

### UNIT - II

- 3.a List and explain the important features of Hadoop and also explain the features of cloud computing that can be used to handle big data. 10
- b. Discuss the working of Map Reduce. 10
- 4.a What is H-Base? Discuss the concept of regins in H-Base. 10
- b. Explain working of Map Reduce algorithm and also discuss the techniques to optimize Map Reduce jobs. 10

### UNIT - III

- 5.a Along with neat diagram, explain YARN architecture and also discuss the advantages of YARN over Map Reduce. 10
- b. Discuss fair sheduling and backword compatibility with YARN. 10
- 6.a Along with neat diagram, explain analytics process. 10
- b. Write a short note on following: 10
- i) Monetized Analytics
- ii) Distributed Models

### UNIT - IV

- 7.a Explain the following in detail: 10
- i) Reporting
- ii) Analysis
- b. Compare rational database and NoSQL and also brief out the CAP theorem. 10

- 8.a What is SAS? Explain the features of SAS. 10
- b. Compare various analytical tools and also list some important features of IBM SPSS. 10

**UNIT - V**

- 9.a List common characteristics of the R language and also write a script for concatenating text and numerical values in R. 10
- b. Explain the following function in detail:
- i) The ls( ) function
  - ii) The rm( ) function 10
  - iii) The getwd( ) function
  - iv) The save( ) function
  - v) The load( ) function
- 10.a. Explain working of c( ) command and scan( ) command with suitable example and also explain
- i) write.table( ) 10
  - ii) write.CSV( )
- b. What R-studio window consists? Brief out all the components. 10

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