

Total No. of Questions : 8

SEAT No. :

PA-1508

[Total No. of Pages : 2]

[5926]-128

T.E. (Information Technology)

DATA SCIENCE AND BIG DATA ANALYTICS

(2019 Pattern) (Semester-II) (314452)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Answer Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Assume suitable data, if necessary.

- Q1)** a) i) Explain Google File system and its advantages. [5]
ii) Explain ETL in Big data. [5]
b) Explain Hadoop distributed file system. [8]

OR

- Q2)** a) i) Write 5 Hadoop Shell commands. [5]
ii) Explain Role Job tracker and Task Tracker in Hadoop Architecture. [5]
b) Explain Map Reduce with proper diagram for word count example. [8]

- Q3)** a) Explain different types of Big Data Analysis techniques. [8]
b) i) Explain Different Data Transformation techniques. [3]
ii) What is dataset? Explain with python syntax of 2 different types of dataset used in Big data. [6]

OR

- Q4)** a) i) Explain Mean, Mode and variance and standard deviation with suitable example. [8]
ii) Explain Data Standardization. [3]
b) Draw and explain Architecture of HIVE. [6]

P.T.O.

- Q5)** a) i) How data visualization help Big data Analytics. [4]
ii) List the conventional Data visualization tools. Explain any Two. [6]
b) Explain data visualization with the help of example? What are the advantages of data visualization? [8]

OR

- Q6)** a) Explain any 4 Types of data visualization with example. [8]
b) i) Explain different data visualization tools. [6]
ii) Explain Data Visualization with Tableau. [4]

- Q7)** a) Explain Text mining with example. [8]
b) Explain Big Data Analytics Challenges in brief. [9]

OR

- Q8)** a) Explain four Big Data use cases. [8]
b) Explain types of Mobile Analytics. [9]

