

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MCA DEGREE EXAMINATION DECEMBER 2018
(Fourth Semester)

Branch - **COMPUTER APPLICATIONS**

CORE ELECTIVE-II - BIG DATA ANALYTICS

Time: Three Hours

Maximum: 75 Marks

SECTION -A (30 Marks!

Answer **ALL** questions

ALL questions carry **EQUAL** Marks (5 x 6 = 30)

- 1 a Define Big Data. Write the characteristics of Big Data.
OR
b Write a short note on traditional and advanced analytics.
- 2 a What are challenges raised in the security infrastructure for Big Data?
OR
b Explain the operations databases layer of Big Data Technology Stack.
- 3 a What is Hypervisor? Write a note on Managing Virtualization with the Hypervisor.
OR
b Write a note on Management and Security challenges with virtualization.
- 4 a Write about Riak key-value database.
OR
b List out the important characteristics of HBase.
- 5 a When will you use basic analytics? Give examples.
OR
b Why Semi-custom applications for big data analytics is important?

SECTION -B (45 Marks!A

Answer any **THREE** questions

ALL questions carry **EQUAL** Marks (3 x 15 = 45)

- 6 Why do we need distributed computing for big data?
- 7 Discuss the Analytical Data Warehouses layer of Big Data Stack.
- 8 Explain the various types of cloud deployment and cloud delivery models.
- 9 Elucidate : (i) Neo4J graph database (ii) Spatial Databases.
- 10 Discuss the characteristics of a Big Data Analysis Framework.