LOYOLA ACADEMY DEGREE & PG COLLEGE, OLD ALWAL

(An Autonomous and Affiliated to Osmania University)

MCA V Semester Final Examinations, December 2018

Subject: Big Data Analytics — **Exam Time: 3 hrs**

Sub Code: MCA 18503 — **Max Marks: 100 M**

Answer the following: (5*20=100M)

UNIT-I

1. a Explain the evolution of Big Data. (10M)

   b. Explain the roles and responsibilities in Big Data job procurement. (10M)

(Or)

2. a. Explain different tools required for Big Data environment establishment. (10M)

   b. Write different elements of Big Data environment. (10M)

UNIT-II

3. a. What is Hadoop? Explain its advantages. (10M)

   b. Explain the file system of Hadoop. (10M)

(Or)

4. a. Explain in detail about Map Reduce Architecture. (10M)

   b. What is HBase? Explain its characteristics. (10M)

UNIT-III

5. a. What YARN? Explain its advantages. (10M)

   b. Write the elements and their purpose of YARN architecture. (10M)

(Or)

6. a. Explain YARN configuration. (10M)

   b. Write about YARN containers and commands. (10M)

UNIT-IV

7. a. What is HIVE? Explain its role in Big Data Analytics. (10M)

   b. Explain any 3 data retrieval formats of HIVE. (10M)

(Or)

8. a. Explain different data types available in HIVE. (10M)

   b. Write different DDL commands of HIVE to create the platform. (10M)

UNIT-V

9. a. Explain different types of operators used in Pig. (10M)

   b. What is No-SQL? Explain different data models in it. (10M)

(Or)

10.a. What is Sharding in No-SQL environment and its role? (10M)

   b. What is the role of Pig in Big Data Analytics. (10M)

LOYOLA ACADEMY DEGREE & PG COLLEGE, OLD ALWAL

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MCA V Semester Final Examinations, December-2018

Subject: Semantic Web & Social Networks **Exam Time: 3 hrs**

Sub Code: MCA 18505 **Max Marks: 100 M**

Answer the following: **(5*20=100M)**

Unit-I

1. a. Explain in detail about Thinking and Intelligent Web Applications. **(12)**
   b. Write short notes on: i) WWW ii) Tim Berners-Lee iii) HTTP. **(08)**

(Or)

2. a. Explain in detail about the Semantic Web Road map. **(12)**
   b. Explain the Logic on the Semantic Web and its Capabilities and Limitations. **(08)**

Unit-II

3. a. What are all the basic elements needed for RDF and explain it along with an example? **(12)**
   b. Differences between RDF and RDFS. **(08)**

(Or)

4. a. Explain about Ontology Methods. **(10)**
   b. Explain about Ontology Engineering. **(10)**

Unit-III

5. Explain in detail about Semantic Bioinformatics and Knowledge Base. **(20)**

(Or)

6. a. Explain about Logic and Inference **(10)**
   b. What is e-learning? **(10)**

Unit-IV

7. a. Explain in detail about Semantic Search Technology. **(20)**

(Or)

8. a. What is Social Network Analysis? Explain the Development of Social Network Analysis. **(10)**
   b. Explain about Electronic Sources of Network Analysis. **(10)**

Unit-V

9. a. Write short notes on Blogs and Online Communities. **(10)**
   b. Explain about Web Based Networks. **(10)**

(Or)

10. How can software applications be build with the help Semantic Network Features? **(20)**

LOYOLA ACADEMY DEGREE & PG COLLEGE, OLD ALWAL
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M.C.A V Semester Final Examinations, December - 2018

Subject: Cloud Computing **Exam Time: 3 hrs**
Sub Code: MCA 18508 **Max Marks: 100 M**

Answer the following: **(5* 20 = 100 M)**

UNIT-I

1. Explain the following in detail:
   a) Grid Computing b) Hardware Virtualization

(Or)

2. a) Explain desired features of a Cloud.
   b) Explain challenges and risks in Cloud Computing.

UNIT-II

3. Explain the levels of Virtualization implementation.

(Or)

4. Explain Physical versus Virtual clusters in detail.

UNIT-III

5. a) Explain the Warehouse-Scale Data Center Design
   b) Explain the Data-Center Management Issues.

(Or)

6. Explain the architecture, functional modules and applications of GAE.

UNIT-IV

7. Explain Cloud Computing and Data Security Risk in detail.

(Or)

8. What is Content Level Security? Explain the Pros and Cons of Content Level Security.

UNIT-V

9. a) What is YouTube? Explain YouTube API Overview in detail.
   b) What is Zoho? Explain Zoho CloudSQL.

(Or)

10. Explain the MapReduce framework in detail.

LOYOLA ACADEMY DEGREE & PG COLLEGE, OLD ALWAL
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M.C.A V Semester Final Examinations, December - 2018

Subject: Python & R Programming **Exam Time : 3 hrs**
Sub Code: MCA 18509 **Max Marks: 100 M**

Answer the following: **(5* 20 = 100 M)**

UNIT-I

1. (a) Discuss Python features **(10M)**
   (b)Explain if, else, else if statements with syntax and an example program. **(10M)**

(Or)

2. (a) Explain about for and while statement with syntax and an example program.
   (b)Explain object identity comparison functions.Write a Python program to add two lists using list comprehension. **(10+10)**

UNIT- II

3. (a) List and describe standard exceptions.
   (b)Write a Python program to handle multiple exceptions. Write short notes on assertions. **(10+10)**

(Or)

4. (a) Explain about how to create a user defined function in python using an example.
   (b) Explain about static methods and class methods with an example.**(10+10)**

UNIT- III

5. (a) How to do database programming through Python? Explain.
   (b)What are regular expressions? Write a Python program to create a regular expression that reads email-ids from a text file. **(10+10)**

(Or)

6. (a) Write a Python program to read data from a table.
   (b) Explain about XML Parsing. **(10+10)**

UNIT- IV

7. (a) Explain various Datatypes in R.
   (b Explain control structures in R with example. **(10+10)**

(Or)

8. (a) Explain different types of operators in R.
   (b) Explain the functioning of apply(), sapply () in R program with one example each. **(10+10)**

UNIT- V

9. (a) Explain the following with example using R.
   i)Mean ii)Median iii) Mode iv)Standard deviation
   (b) Write about scatter plot and histograms with examples? **(10+10)**

(Or)

10. (a) Write R code to generate the probability distribution table for number of successes from a binomial distribution where n=6 and probability of success in each trial is 0.5.
    (b) Write R code to carry out Linear regression with simple examples. **(10+10)**

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M.C.A V Semester Final Examinations, December - 2018

Subject: Object Oriented System Development — **Exam Time:** 3 hrs

Sub Code: MCA 18510 — **Max Marks:** 100 M

Answer the following: (5* 20 = 100 M)

UNIT-I

1) Explain various common mechanisms in UML. (20M)

(Or)

2) How Class diagram is important in UML Explain with example. (20M)

UNIT-II

3) Illustrate modeling of Activity diagram with an example. (20M)

(Or)

4) Explain about State Machine modelling with example. (20M)

UNIT-III

5) Explain the basic elements of Deployment diagram and give UML notations. (20M)

(Or)

6) Write about Artifact diagrams. (20M)

UNIT-IV

7) Write about Use-Case Driven process with an example of Library application. (20M)

(Or)

8) (a) Explain about Unified process model. (12M)

(b) Explain Four Ps (08M)

UNIT-V

9) Write a short notes on Requirements Capture and explain capturing Requirements as Use –Cases. (20M)

(Or)

10) Explain the role of Design in the software life cycle in detail. (20M)