

Hall Ticket Number :

R-15

Code: 5G171

IV B.Tech. I Semester Regular & Supplementary Examinations November 2019

Big Data & Data Analytics

(Computer Science and Engineering)

Max. Marks: 70

Time: 3 Hours

Answer all five units by choosing one question from each unit (5 x 14 = 70 Marks)

UNIT-I

- 1. a) What is Big Data Analytics? Explain the Classification of Analytics. 7M
- b) Explain the nuts and bolts of Big Data 7M

OR

- 2. a) Compare and contrast the RDBMS and map-reduce. 7M
- b) Give a brief note on elements of Big Data 7M

UNIT-II

- 3. a) Discuss the internal structure of a sequence file with no compression and record compression. 7M
- b) Explain the Data Integrity in HDFS. 7M

OR

- 4. a) Write the procedure for Converting a Sequence File to a Map File. 7M
- b) Elaborate the terms Compression and Serialization 7M

UNIT-III

- 5. a) How status updates are propagated through the MapReduce system? Explain 7M
- b) Write the Relationship Between Input Splits and HDFS Blocks 7M

OR

- 6. a) Illustrate the Shuffle and sort in MapReduce. 7M
- b) What are the differences Between Multiple Output Format and Multiple Outputs? Explain. 7M

UNIT-IV

- 7. a) List and explain the dfsadmin commands. 7M
- b) How Do Metrics Differ from Counters? Explain 7M

OR

- 8. a) Give a brief note on SSH Configuration and Hadoop Configuration. 7M
- b) Explain the Benchmarking a Hadoop Cluster. 7M

UNIT-V

- 9. a) Write a short note on Pig Latin. 7M
- b) Explain the Hive Shell with an Example 7M

OR

- 10. a) List and explain the various file formats supported by HIVE 7M
- b) Elaborate the data processing operators in Pig 7M

Hall Ticket Number :

R-15

Code: 5G471

IV B.Tech. I Semester Regular & Supplementary Examinations November 2019

Cloud Computing
(Common to CSE & IT)

Max. Marks: 70

Time: 3 Hours

Answer all five units by choosing one question from each unit (5 x 14 = 70 Marks)

UNIT-I

1. a) Discuss how cloud computing addressed some of the limitations of former technologies which have offered similar services. 7M

b) Illustrate the usage of cloud as a service, by considering suitable applications. 7M

OR

2. a) Discuss the working of Microsoft Azure cloud with a neat block diagram. Discuss the role of CDN. 7M

b) Justify the SLA is one of the main requirements in cloud computing, provide an example. 7M

UNIT-II

3. a) Give the palette of workflows coordination types, illustrate any three out of them with suitable real-world application. 7M

b) Illustrate the use of cloud services in transportation industry. 7M

OR

4. a) Discuss in detail the working of Map-Reduce programming model for parallel computation. Give the word frequency count example for the same. 7M

b) Illustrate the use of cloud services in manufacturing industry. 7M

UNIT-III

5. a) Define Virtualization. Discuss the role VMM in cloud computing virtualization. 7M

b) Discuss the concept of layering, and role of various interfaces. 7M

OR

6. a) Explain how virtualization could become fatal for your organization by highlighting its darker side, 7M

b) Explain the network optimization of the Xen hypervisor with a neat diagram. 7M

UNIT-IV

7. a) Discuss the application of control theory for task scheduling in cloud computing environment. 7M

b) Explain in detail the working of utility-based model for cloud-based web services. 7M

OR

8. a) Give the theory behind start time fair queuing and borrowed virtual time. 7M

b) Explain the working of fair queuing with all necessary equations to compute finish time and round number. 7M

UNIT-V

9. a) Discuss the organization and working of GFS. 7M

b) Give the significant role of the following in cloud services:

i. Hadoop

ii. Locks and Chubby 7M

OR

10. a) "Privacy is a major security concern in cloud services", justify by considering one of the popular applications which uses cloud, say, Facebook 7M

b) Discuss in detail the security attacks possible over VMM. 7M

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IV B.Tech. I Semester Regular & Supplementary Examinations November 2019

Enterprise Programming

(Common to CSE & IT)

Max. Marks: 70

Time: 3 Hours

Answer all five units by choosing one question from each unit (5 x 14 = 70 Marks)

UNIT-I

1. a) In detail explanation to handle http request and http response? 7M
- b) What is Web Server? How do you install XAMPP/WAMPP Server into system? Explain 7M

OR

2. a) Define PHP? How do you print "Hello Enterprise Programming aspirants" in PHP? 4M
- b) Create a PHP script that demonstrates the usage of PHP 10M

UNIT-II

3. a) Develop a Program on PHP using all Arithmetic Operators and Logical Operators with suitable example? 10M
- b) Describe the Abstract Class and Methods in PHP? 4M

OR

4. a) Create a PHP script to demonstrate the usage of if-else and switch statements with suitable example 10M
- b) Importance of Destructors in PHP 4M

UNIT-III

5. a) Create a PHP script that create and retrieve a Cookie. 12M
- b) Difference between GET and POST methods in PHP 2M

OR

6. a) Create a PHP script that demonstrates the usage of PHP super global variable \$_POST to collect Form data. 10M
- b) Write a PHP Program on Current Date and Time 4M

UNIT-IV

7. Create a registration Form with following text fields SId, Name, Address and a submit button. Write PHP code to insert the above values into a database table 14M

OR

8. a) Procs and Cons of Web Application Today's Scenario 4M
- b) How do you send Request to the Server using AJAX? Explain 10M

UNIT-V

9. a) Difference between PHP and AJAX 7M
- b) Write a PHP program to validate the form 7M

OR

10. a) Explain expanding and contracting the content in PHP with suitable examples 10M
- b) Discuss on Client Driven Communication 4M

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Code: 5G173

IV B.Tech. I Semester Regular & Supplementary Examinations November 2019

Industrial Management & Entrepreneurship

(Computer Science and Engineering)

Max. Marks: 70

Time: 3 Hours

Answer all five units by choosing one question from each unit (5 x 14 = 70 Marks)

UNIT-I

1. Describe Fayol's principles of management.

OR

2. What is marketing? Explain the differences between marketing and selling.

UNIT-II

3. Describe various functions of Production Management.

OR

4. Explain the importance of EOQ and ABC analysis in inventory control.

UNIT-III

5. What is capital budgeting? Explain the methods of capital budgeting in project evaluation.

OR

6. What is working capital? Explain the factors determining the working capital of a firm.

UNIT-IV

7. Describe the functions of Personnel Management.

OR

8. Explain about Maslow's theory of motivation.

UNIT-V

9. What is Entrepreneurship? Explain the factors influencing the Entrepreneurship.

OR

10. What is product design? Describe the factors influencing product design.

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R-15

Code: 5G478

IV B.Tech. I Semester Regular & Supplementary Examinations November 2019

Object Oriented Analysis and Design

(Common to CSE & IT)

Max. Marks: 70

Time: 3 Hours

Answer all five units by choosing one question from each unit (5 x 14 = 70 Marks)

UNIT-I

1. a) What is UML? Draw and explain different views of UML 7M
- b) Discuss Software development life cycle with neat diagram 7M

OR

2. a) What is modeling? Explain object oriented modeling with neat diagram 7M
- b) What are common mechanisms? Discuss 7M

UNIT-II

3. a) Describe different kinds of classifiers to build a model with diagrams 7M
- b) What are relationships? Explain with examples 7M

OR

4. a) Design and explain a class diagram for library information system 7M
- b) Explain common modeling techniques for object diagrams 7M

UNIT-III

5. a) Draw and explain interaction diagrams with examples 7M
- b) What are the components of activity diagram? Explain with example 7M

OR

6. Develop use case diagram for ATM and Discuss use case diagrams 14M

UNIT-IV

7. a) What are events and signals? Discuss 7M
- b) Construct a state machine diagram for different objects in library information system 7M

OR

8. What are Processes and threads? Explain the concept of Inter process communication 14M

UNIT-V

9. Define component diagrams and how these component are helpful in designing Interfaces and APIs 14M

OR

10. a) What are deployment diagrams? Explain 7M
- b) Explain documents of Library system 7M

Code: 5G175

IV B.Tech. I Semester Regular & Supplementary Examinations November 2019

Semantic Web and Social Networks

(Computer Science and Engineering)

Max. Marks: 70

Time: 3 Hours

Answer all five units by choosing one question from each unit (5 x 14 = 70 Marks)

UNIT-I

1. a) Outline why intelligent ubiquitous devices improve productivity? 7M
 b) Elaborate why artificial intelligence and web researchers use the term ontology as a document that defines the relations among terms. 7M

OR

2. a) What are Software Agents? What are the characteristics that followed by agents? 7M
 b) List the alternatives to address NP-complete problems that are encountered frequently in AI. 7M

UNIT-II

3. a) How knowledge representation functionality is defined in semantic web? Explain? 7M
 b) Discuss about W3C defined OWL sub languages? 7M

OR

4. a) Compare Extensible Markup Language and XML Schema. 7M
 b) What are the elements of RDF triple? Explain with an example? 7M

UNIT-III

5. a) What is ontology engineering? List the categories of ontology applications. 7M
 b) Identify the most common editors used for building ontologies. 7M

OR

6. a) What is GLUE? Classify Content Learner, Name Learner and Meta Learner. 7M
 b) What are conditional transformation and biconditional transformation rules? Explain with examples. 7M

UNIT-IV

7. a) Briefly explain the following semantic web applications
 i. Semantic Search
 ii. Semantic bioinformatics
 iii. e-learning 7M
 b) Elaborate the four major components of SWOOGLE architecture. 7M

OR

8. a) Discuss the four functions that automate ontology for Web Services provided by OWL-S. 7M
 b) Distinguish Relationship between OWL-S and WSDL and SOAP 7M

UNIT-V

9. a) What is social network analysis? Briefly describe development of social network analysis. 7M
 b) Discuss about blogs and online communities? 7M

OR

10. a) Discuss about Web-based networks 7M
 b) Describe the generic architecture of Semantic Web applications 7M
