

Hall Ticket Number :

R14

Code: 4P3121

M.Tech. II Semester Regular & Supplementary Examinations Aug/Sep 2016

Managing Big Data

(Computer Science & Engineering)

Max. Marks: 60

Time: 3 Hours

Answer all five units by choosing one question from each unit (5 x 12 = 60Marks)

UNIT-I

1. a) Define Unstructured Data Analytics. Elaborate on Context-Sensitive and Domain-Specific Searches. 6M
- b) Explain how risks are handled in big-data. 6M

OR

2. a) What are the applications of big-data? Explain. 6M
- b) Write about Hadoop technology for big-data analytics. 6M

UNIT-II

3. a) Write about Column Based NoSQL Database Management Systems. 6M
- b) Compare and contrast NoSQL DBMSs Vs Relational DBMSs. 6M

OR

4. a) Write about aggregate models, distribution models and sharding in NoSQL. 6M
- b) Discuss the significance of map reduce in NoSQL. 6M

UNIT-III

5. a) Discuss in detail the design of Hadoop distributed file system (HDFS). 6M
- b) Discuss in detail analyzing data with Hadoop. 6M

OR

6. Discuss in detail HDFS concepts. 12M

UNIT-IV

7. a) Write about Map Reduce types. 6M
- b) Discuss the process of task execution with Map Reduce. 6M

OR

8. a) Write about Map Reduce work-flows. 6M
- b) Write about failures in classic Map-reduce and YARN. 6M

UNIT-V

- 9 a) Write about developing and testing Pig Latin scripts. 6M
 - b) Write about data types and file formats in HiveQL. 6M
10. Discuss about Hbase and Cassandra hadoop related tools in detail. 12M

Code: 4P3123*M.Tech. II Semester Regular & Supplementary Examinations Aug/Sep 2016***Software Architecture and Design Patterns**

(Computer Science & Engineering)

Max. Marks: 60

Time: 3 Hours

Answer all five units by choosing one question from each unit (5 x 12 = 60Marks)

UNIT-I

1. Discuss about different design problems solved by design patterns in detail with examples? 12M

OR

2. a) What is the use of constant data manager for Design patterns? 6M
 b) Write a short note on
 (i) immutable object
 (ii) Monitor. 6M

UNIT-II

3. a) Explain structure, participants and consequences of abstract factory? 6M
 b) Discuss motivation, applicability and implementation of Prototype pattern? 6M

OR

4. Explain Flyweight pattern in detail? 12M

UNIT-III

5. a) Write a sample code for decorator and explain its uses and related patterns. 6M
 b) Write short note on
 (i) Explicit Object Release
 (ii) Object Cache. 6M

OR

6. Explain Bridge pattern in detail? 12M

UNIT-IV

7. a) Write short note on
 (i) Object Authenticator
 (ii) Common Attribute Registry. 6M
 b) Discuss the Structure, participants and collaboration of State pattern. 6M

OR

8. Explain Observer pattern in detail? 12M

UNIT-V

9. a) Discuss the implementation issues which are need to be handled by consistent lock order? 6M
 b) What are the uses of critical section pattern in real time scenario? 6M

OR

10. Explain about guarded suspension in detail with examples? 12M

Hall Ticket Number :

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R14

Code: 4P3122

M.Tech. II Semester Regular & Supplementary Examinations Aug/Sep 2016

Open Systems for Web Technologies

(Computer Science & Engineering)

Max. Marks: 60

Time: 3 Hours

Answer all five units by choosing one question from each unit (5 x 12 = 60Marks)

UNIT-I

1. a) Explain about Transaction management. 6M
- b) Write a program to illustrate usage of scrollable and updatable result set. 6M

OR

2. Explain different types of JDBC drivers and their significance, 12M

UNIT-II

3. a) Explain about cookies in detail. 4M
- b) Explain about session tracking in servlets. 8M

OR

4. a) Explain about different classes and methods in javax.servlet package. 6M
- b) Explain about POST and GET methods in servlet. 6M

UNIT-III

5. a) Explain JSP MVC Architecture. 8M
- b) Write a program to create dynamic web table content using JSP. 4M

OR

6. a) Explain different components of JSP. 6M
- b) Explain about JSP tag library. 6M

UNIT-IV

7. Mention different steps involved in building a simple Struts application with an example. 12M

OR

8. Explain the significance of Model Layer, View Layer and Controlled Layer in Struts. 12M

UNIT-V

9. Explain about Exception handling in Struts with example. 12M

OR

10. What is a Bean? Write a program to illustrate the concept of Java Bean. 12M

Code: 4P3124*M.Tech. II Semester Regular & Supplementary Examinations Aug/Sep 2016***Distributed Operating Systems**

(Computer Science & Engineering)

Max. Marks: 60**Time: 3 Hours**

Answer all five units by choosing one question from each unit (5 x 12 = 60Marks)

UNIT-I

1. a) Explain the advantages of distributed system over centralized system. 4M
- b) Write short notes on group communication. 8M

OR

2. a) What is asynchronous transfer mode? Discuss about ATM reference model. 8M
- b) Explain parameter passing mechanism in RPC. 4M

UNIT-II

3. Explain in detail about deadlock prevention, deadlock detection and recovery. 12M

OR

4. a) Explain design and implementation issues for processor allocation algorithms. 6M
- b) Explain in detail about fault tolerance in distributed system. 6M

UNIT-III

5. Discuss file system implementation in Distributed system. 12M

OR

6. a) Explain in detail about Network File System Architecture. 8M
- b) Why do some distributed systems use two-level naming? Explain. 4M

UNIT-IV

7. a) Explain with an example of how a cache ownership protocol works. 6M
- b) Write about directories in shared memory. 6M

OR

8. a) Explain the properties of NUMA multiprocessor. 4M
- b) Explain the spectrum of shared memory mechanisms. 8M

UNIT-V

9. Explain various consistency models not using synchronization operation. 12M

OR

10. Explain in detail about object based distributed shared memory. 12M

Code: 4P3127

M.Tech. II Semester Regular & Supplementary Examinations Aug/Sep 2016

Cloud Computing

(Computer Science & Engineering)

Max. Marks: 60

Time: 3 Hours

Answer all five units by choosing one question from each unit (5 x 12 = 60Marks)

UNIT-I

1. a) Make a comparison between the Intel virtualization and Red hat virtualization. 8M
b) Give a brief note on software as a service. 4M

OR

2. a) Describe the Hardware assisted virtualization. 6M
b) Explain the terms Ubuntu, Altiris, Windows. 6M

UNIT-II

3. a) Write notes on the storage virtualization technologies. 8M
b) Elaborate on the Net framework virtualization. 4M

OR

4. a) Explain the client hosted desktop virtualization. 4M
b) Write short notes on Virtual Desktop Infrastructure. 8M

UNIT-III

5. Draw and explain the service knowledge management systems in detail. 12M

OR

6. Explain about improving capacity through virtualization. 12M

UNIT-IV

7. a) Define grid computing. Write the characteristics of grid computing. 8M
b) Write about the evolution of cloud computing. 4M

OR

8. a) Discuss the various security mechanisms of cloud storage services. 8M
b) Give a brief note on distributed computing. 4M

UNIT-V

9. How data security is different from host security? Explain the techniques for achieving data security in Cloud. 12M

OR

10. Explain the following:
a) Google APP Engine
b) Oracle OBIEE
c) Cloud Scale 12M

Code: 4P3128

M.Tech. II Semester Regular & Supplementary Examinations Aug/Sep 2016

Mobile Computing

(Computer Science & Engineering)

Max. Marks: 60**Time: 3 Hours**

Answer all five units by choosing one question from each unit (5 x 12 = 60Marks)

UNIT-I

1. a) How calls are handled in GSM. 6M
 b) How the data service is provided by GSM 6M

OR

2. Explain in detail GSM architecture 12M

UNIT-II

3. a) How tunneling and encapsulation are used in Mobile IP 8M
 b) What are the goals of mobile IP 4M

OR

4. a) How home and foreign agents operate in mobile IP 7M
 b) What are the differences between agent discovery and advertisement? 5M

UNIT-III

5. a) What are the problems of using traditional TCP in mobile networks? 4M
 b) How snooping TCP works 8M

OR

6. a) How indirect TCP works 7M
 b) What is the use of selective retransmission? 5M

UNIT-IV

7. a) What are the indexing techniques used for data dissemination in mobile networks. 8M
 b) What are the properties of MANET? 4M

OR

8. a) Can we use security mechanisms of wired networks in mobile networks?
 Justify your answer. 4M
 b) What are the security mechanisms suitable for MANETs 8M

UNIT-V

9. Explain in detail wireless application protocol. 12M

OR

10. Explain the use of blue tooth technology for communication. 12M
