

Code : 1P3122

ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES :: RAJAMPET
(AUTONOMOUS)

M.Tech. II Semester Regular Examinations, December 2013

Software Architecture and Design Patterns

Time: 3 hours

Max Marks: 60

*Answer any FIVE of the following
All questions carry equal marks (12 Marks each)*

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|-------|--|----|
| 1. a) | What are design patterns? Give their advantages. | 6M |
| b) | Briefly explain the factors for the selection of design pattern. | 6M |
| 2. a) | What is an Interface? Explain Abstract Parent Class with example. | 8M |
| b) | Discuss about Immutable objects. | 4M |
| 3. a) | Give the advantages of Creational Patterns. | 4M |
| b) | Explain about Abstract Factory method in detail. | 8M |
| 4. a) | Distinguish between Composite and Iterator Patterns. | 6M |
| b) | Write about Flyweight Pattern. | 6M |
| 5. a) | What are the uses of Structural Patterns? Explain Façade Pattern with example. | 6M |
| b) | Differentiate between Virtual Proxy and Counting Proxy pattern. | 6M |
| 6. a) | Explain about Mediator pattern with example. | 6M |
| b) | Explain about strategy pattern. | 6M |
| 7. a) | Give the significance of Template pattern and explain it in detail. | 8M |
| b) | Discuss about common attribute registry. | 4M |
| 8. a) | What are concurrency patterns? Give examples. | 4M |
| b) | Write about Consistent Lock Order. | 8M |

**ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES :: RAJAMPET
(AUTONOMOUS)**

M.Tech. II Semester Regular Examinations, December 2013

Cloud Computing

(CSE)

Max. Marks: 60

Time: 03 Hours

Answer any five questions

All Questions carry equal marks (12 Marks each)

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| 1. a. | What is Virtualization? What are the objectives of Virtualization? | 6M |
| b. | Explain various benefits of Virtualized Technology. | 6M |
| 2. | Explain about: | 12M |
| | i. Software Virtualization | |
| | ii. Red hat Virtualization | |
| | iii. Hardware assisted virtualization | |
| | iv. Desktop Virtualization | |
| 3. a. | Explain about Para virtualization. | 6M |
| b. | What are the various Virtualization Levels? Explain | 6M |
| 4. a. | What are the things to consider before migration? | 6M |
| b. | What are the risks associated with virtualization? | 6M |
| 5. a. | Explain about: | 6M |
| | i. Infrastructure as Service | |
| | ii. Platform as Service | |
| | iii. Software as Service | |
| b. | What are the advantages of a cloud infrastructure? | 6M |
| 6. a. | What are various Cloud Models that exists? | 6M |
| b. | Explain about | 6M |
| | i. Grid Computing | |
| | ii. Transactional Computing | |
| | iii. On Demand Computing | |
| | iv. Distributed Computing. | |
| 7. a. | Explain with neat sketch about the concept of a firewall in the Amazon cloud | 6M |
| b. | Explain about Data Segmentation and Host Intrusion Detection | 6M |
| 8. | What are the various disasters in the cloud? Explain in detailed. | 12M |

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Code : 1P3121

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ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES :: RAJAMPET
(AUTONOMOUS)

M.Tech. II Semester Regular Examinations, December 2013

Datawarehousing and Mining

Time: 3 hours

Max Marks: 60

*Answer any FIVE of the following
All questions carry equal marks (12 Marks each)*

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1. a) Explicate the various data pre processing techniques with example. 8M
b) Thrash out the details of data reduction 4M
2. a) Explain Data ware house architecture in detail. 6M
b) Enlighten the multidimensional data model used in data warehousing 6M
3. a) Design a Graphical design oriented data mining query language. 6M
b) Explain data mining query language. 6M
4. a) Elaborate the various statistical measures used in large databases. 6M
b) Write short notes on class comparison techniques used in mining. 6M
5. a) Explain multidimensional association rule used in data mining. 6M
b) Discuss how correlation used in association mining. 6M
6. a) Explain the decision tree induction algorithm. 6M
b) Illustrate Bayes theorem and naïve Bayes classification algorithm. 6M
7. a) Elucidate the two main methods used in Grid based clustering approach. 6M
b) Differentiate distance based and density based outlier methods 6M
8. a) Elaborate the techniques used in world wide web mining. 6M
b) Discuss about spatial mining techniques. 6M

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ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES :: RAJAMPET
(AUTONOMOUS)

M.Tech II Semester Regular December, 2013

DISTRIBUTED OPERATING SYSTEMS

(Computer Science and Engineering)

(For Students Admitted in 2011-2012)

Max. Marks: 60

Time: 03 Hours

Answer any five full questions

All Questions carry equal marks (12 Marks each)

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|-------|---|-----|
| 1. a. | What is meant by a single-system image? | 4M |
| b. | Differentiate distributed operating system and network operating system? | 4M |
| c. | Write a note on switched multiprocessors? | 4M |
| 2. a. | What are the main similarities between the RPC model and the ordinary procedure call model? | 6M |
| b. | Explain in details about Asynchronous Transfer Mode (ATM) networks? | 6M |
| 3. a. | How deadlocks are handled in distributed systems? Explain? | 6M |
| b. | Explain distributed mutual exclusion algorithm? | 6M |
| 4. a. | What is the Real-Time scheduling? How is dynamic load sharing and balancing done? | 6M |
| b. | What are the implementation issues for Processor Allocation Algorithms? | 6M |
| 5. | What are the characteristics of the Distributed file systems? How is concurrency control achieved in DFS? | 12M |
| 6. a. | What is a shared memory? | 4M |
| b. | Differentiate Bus-based multiprocessors and Ring-based multiprocessors? | 8M |
| 7. | Explain the following consistency models | |
| a. | Strict consistency | 4M |
| b. | Sequential consistency | 4M |
| c. | Weak consistency | 4M |
| 8. a. | List out the goals of MACH? | 6M |
| b. | Write a note on Mach Microkernel? | 6M |

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Code : 1P3129

ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES :: RAJAMPET
(AUTONOMOUS)*M.Tech. II Semester Regular Examinations, December 2013***Mobile Computing**
(CSE)

Time: 3 hours

Max Marks: 60

*Answer any FIVE of the following**All questions carry equal marks (12 Marks each)*

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1. What is GSM? Explain GSM Architecture? 12M
2. How MAC behaves differently in Mobile Communications? Write a notes on Hidden & Exposed Terminals? 12M
3. Compare and contrast between Mobile IP & DHCP? Explain? 12M
4. Explain different types of TCP in Mobile Transport Layer? 12M

5. Write a short notes on 12M
 - a) Transaction Models
 - b) Query Processing
 - c) Recovery
6. What are the Indexing techniques? Explain? 12M
7. What is Routing? Describe various routing algorithms in MANETs? 12M
8. a) Write short notes on WAP? 8M
 - b) Explain Link Management in Bluetooth 4M

**ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES :: RAJAMPET
(AUTONOMOUS)**

M.Tech II Semester Regular December, 2013

Open Systems for Web Technologies

(CSE)

Max. Marks: 60

Time: 03 Hours

Answer any five questions

All Questions carry equal marks (12 Marks each)

1. a. Explain the following terms related to HTML table Example: 6M
 - i. Cell padding and spacing
 - ii. Borders
 - iii. Formatting content in Table cells
- b. Write about Different ways applying of CSS to HTML elements with examples? 6M
2. a. Create a javascript which has event handlers for the buttons “red”, “blue”, “green”, “yellow” and “orange” which must produce messages stating the chosen favorite color. The event handler must be implemented as a function, whose name must be assigned to the onClick attribute of the radio button elements. The chosen color must be sent to the event handler as a parameter. 6M
- b. Write the properties and methods of the following java script objects. 6M
 - i. Document
 - ii. Window
 - iii. Navigator
3. a. Write a sample XML scheme and write a sample XML File to include this schema in the XML File? 8M
- b. Write the differences between DOM and SAX? 4M
4. a. Explain the process of servlet execution with the Apache Tomcat Server with example? 8M
- b. Explain any four methods of Servlet Request Interface? 4M
5. a. Write about the JSP processing? 6M
- b. Develop a JSP to accept user's first name and then welcome the user by name using Tomcat Web Server? 6M
6. a. Explain the UseBean tag of a JSP with example? 6M
- b. Explain the include tag of a JSP with example? 6M
7. a. Write Steps and sample program of a JSP which will connect to a database using JDBC? 8M
- b. Explore Java.Sql.Statement Interface Methods? 4M
8. a. Write steps to Install IIS for Windows and How can You Execute an ASP Program Using IIS? 6M
- b. What is Mean By CMS? What are the need and Benefits of CMS? 6M

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