

MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)

(Affiliated to JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD)
Gundlapochampally (H), Maisammaguda (V), Medchal (M), Medchal-Malkajgiri (Dist), Hyderabad

III B.TECH II SEMESTER SUPPLEMENTARY EXAMINATIONS, DECEMBER -2018Subject: Compiler Design

Branch: CSE

Time: 3 hours

Max. Marks: 75

Answer any FIVE Questions of the following

5x15M=75M

1. Explain about pass and phases of translation with an example. [15 M]
2. a) Consider the following grammar (7M)
 $S \rightarrow 0A/1B/0/1$
 $A \rightarrow 0S/1B/1$
 $B \rightarrow 0A/1S$
Construct leftmost derivation and parse tree for the following sentences
i. 0101
ii. 1100101
b) Compute FIRST and FOLLOW Sets for all non terminals in the following grammar (8M)
 $S \rightarrow Aa/bAc/Bc/bBa$
 $A \rightarrow d$
 $B \rightarrow d$
3. a) Explain the procedure for constructing set of items in SLR parsers [7]
b) Compute LR(0) items for the following grammar $S \rightarrow AB$ $A \rightarrow a/\epsilon$ $B \rightarrow b/\epsilon$ [8]
4. a) Construct the syntax directed translation scheme to convert a given arithmetic expression into three-address code. [9M]
b) Differentiate between S-Attributed grammar and L-Attributed grammar. [6M]
5. a) Explain in detail about various storage allocations strategies (8M)
b) Explain about implicit and explicit storage requests (7M)
6. a) Explain about following basic block optimization techniques (i) Structure preserving transformation (ii) Use of algebraic identities (8M)
b) Explain the DAG representation of block (7M)
7. Explain about redundant sub expression elimination. [15 M]
8. a) Explain common issues in design of code generator?
b) Explain about usage count

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III B.TECH II SEMESTER SUPPLEMENTARY EXAMINATIONS, DECEMBER -2018Subject: Web Technologies

Branch: CSE

Time: 3 hours**Max. Marks: 75**Answer any **FIVE** Questions of the following**5x15M=75M**

1. a) What are the different types of lists in HTML? Explain how these lists are created in HTML with suitable example. 7M
b) Explain the following terms related to HTML table Cell padding and spacing, Nested tables 8M
2. a) Compare and contrast HTML and DHTML 8M
b) Write a JavaScript to validate a form consisting of a username. Also navigate to another web page after validation 7M
3. a) Give the syntax of an XML document and explain how a basic XML document is created with an example
b) What is XSLT? Discuss in brief. [7+8M]
4. a) Give the differences between Java Beans and Enterprise Java Beans. [7+8M]
b) What are application builder tools? Explain the capabilities of the application builder tools.
5. a) List and describe the classes that are provided in the javax.servlet package. [7+8M]
b) Write about the methods present in Servlet interface.
6. a) What are the limitations of servlets? How JSP overcomes these problems. [7+8M]
b) Develop a JSP to accept users first name and then welcome the user by name.
7. a) Discuss about dynamic content.
b) Discuss error handling mechanisms. [7+8M]
8. a) Write a JDBC program to display the result of any query on a student table in a J Table component.
b) Discuss about prepared statements. [7+8M]

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III B.TECH II SEMESTER SUPPLEMENTARY EXAMINATIONS, DECEMBER -2018Subject: **SOFTWARE TESTING METHODOLOGIES**

Branch: CSE

Time: 3 hours**Max. Marks: 75**Answer any **FIVE** Questions of the following**5x15M=75M**

1. Explain the goals for testing. Discuss in detail about various Dichotomies.
2. Discuss the following terms in detail:
 - a) Predicates and Predicate expressions
 - b) Predicate coverage
 - c) Achievable paths
3. a) Explain about data flow testing. [8]
b) Explain performance testing of database application. [7]
4. a) Explain briefly about the different domain errors encountered when a software tester assume the bugs. [7]
b) Distinguish between, One-dimensional domain testing and two dimensional domain testing with example. Give the different bugs encountered in the above domain testing techniques. [8]
5. a) Describe briefly basis path testing with an example. [8]
b) Explain the stages and benefits of inspection process. [7]
6. a) Design a decision table for the sample ATM banking system assuming the necessary data. [7]
b) Briefly describe the KV charts for functions of a single variable and double variables. [8]
7. a) What are the software implementation issues in state testing? [8]
b) Explain about good state and bad state graphs. [7]
8. a) Explain in detail about Usage of JMeter and Winrunner tools for Regression testing. [8]
b) Write about loops in matrix representation [7]