

**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-2019**Subject: **WEB TECHNOLOGIES**Branch: **CSE****Time: 3 hours****Max. Marks: 75****Answer any 5 questions of the following****5x15M=75 M**

1. a) Explain how a basic table is created using HTML. [7M]  
b) Explain basic formatting tags. [8M]
2. a) How do you get JavaScript onto a web page? Explain with examples? [9M]  
b) Write a function in java script that validates if the content has the general syntax of an email? [6M]
3. a) Write XML database with details of student (Rollnum, Name(first\_name,Last\_name) parent name(First\_name, Last\_name) branch, year, address (Door\_No, Street, City), Email, Ph.No. and write DTD to validate the above XML file. [7M]  
b) Explain How XML schema is better than DTD. [8M]
4. a) What are the advantages of JAVA beans? [7M]  
b) Explain about Bean info interface. [8M]
5. a) Write a servlet program to display form details when you click on submit button. [9M]  
b) Explain the core interface provided in javax.servlet.http package. [6M]
6. Discuss JSP Application design with MVC set up and JSP environment.
7. a) Develop a JSP to detect the web browser. [6M]  
b) Explain JSP scripting components with examples. [9M]
8. a) Explain about Javax.sql.\* package. [6M]  
b) Explain different types of JDBC drivers with a neat sketch. [9M]

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**III B.TECH II SEMESTER SUPPLEMENTARY EXAMINATIONS, DECEMBER-2019**Subject: **SOFTWARE TESTING METHODOLOGIES**

Branch: CSE

Time: 3 hours

Max. Marks: 75

Answer ANY FIVE questions of the following

5x15M= 75M

1. a) Explain model for testing. [7M]  
b) Compare and contrast between testing versus Debugging. [8M]
2. a) Discuss about control flow graphs. What are difference between control flow graphs and flow charts. [8M]  
b) Why All-du-Paths (ADUP) is the strongest data-flow testing strategy? [7M]
3. a) What are the transaction flows? Discuss their complications. [7M]  
b) Compare the transaction testing strategies with the data- flow testing. [8M]
4. a) How programmers and testers treat Ugly Domains? [9M]  
b) Explain the acronym Closed Off Outside, Open Off Inside (COOOOI) in domain testing. [6 M]
5. a) Explain the procedure used in testing loops in path testing. [9M]  
b) Explain the terms paths, nodes and links. [6M]
6. a) What is decision table and how does it is useful in testing. Explain it with help of an example. [9M]  
b) Explain about K V chats with suitable examples. Discuss their applications. [6M]
7. a) What are the types of bugs that can cause state graphs. [7M]  
b) What are principles of state testing? Explain its advantage and disadvantages. [8M]
8. a) Explain in detail performance testing. [8M]  
b) Discuss about the partitioning algorithm [7M]

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**III B.TECH II SEMESTER SUPPLEMENTARY EXAMINATIONS, DECEMBER-2019**Subject: **COMPILER DESIGN**Branch: **CSE****Time: 3 hours****Max. Marks: 75****Answer any 5 questions of the following****5x15M=75 M**

1. a) List the differences between compiler, interpreter and assembler [7M]  
b) Discuss about specification of tokens in detail [8M]
2. a) Explain basic steps to construct recursive decent parser [10+5M].  
b) Writ the psecudo code for the following grammar

$$E \rightarrow \text{num } T$$
$$T \rightarrow * \text{ num } T / \varepsilon$$

3. Consider the following grammar

$$S \rightarrow Aa$$
$$S \rightarrow bAc$$
$$S \rightarrow dc$$
$$S \rightarrow bda$$
$$S \rightarrow d$$

Discuss the LALR parsing method for this grammar list out canonical collections and also construct a parsing table.

4. a) Explain about implicit and explicit type conversions [7M]  
b) Construct the syntax tree for the expression  $x*y-5+z$  [8M]
5. Explain various data structures used to implement the symbol table.
6. Explain different loop optimization techniques.
7. What is a flow graph? Explain how a given program is converted into a flow graph with an illustrative example.
8. Explain about Register Allocation and Assignment in detail