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| **P.V.P Siddhartha Institute of Technology(Autonomous)** | | | | | | | | | | | | | | | | | | | | | | **Signature of Invigilator with date:** | | **Marks Obtained:** | |
| **Department of Computer Science and Engineering** | | | | | | | | | | | | | | | | | | | | | |
| **Course: B. Tech** | | **Year: III** | | | | | **Semester: II** | | | | | | | | **Objective: I** | | | | | | |
| **Regulation:PVP20** | | **Maximum Marks:10Marks** | | | | | | | | | | | | | | | **Session: F. N** | | | | |
| **A.Y:2024-25** | | **Date:20-01-2025** | | | | | | | | **Duration: 20 min** | | | | | | | | | | | |
| **Subject Name: Compiler Design** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Registered Number:** | | | | | | | | | | | | | | | | **Name:** | | | | | | | | | | |
| **Answer all the Questions. Each Question carries ½ Mark 20×½ M =10M** | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **S. No** | **Question** | | | | | | | | | | | | | | | | | | | | | | **CO** | **Level** | **Answer** |
| 1. | **Which of the following does macro expansion** | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a. Preprocessor | | | | | b. Linker | | | | | | | | c. Assembler | | | | | | | d. Loader | |
| 2. | **Which of the following is the first phase of Compiler?** | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a. Lexical Analysis | | | | | | | | | | | | | b. Syntax Analysis | | | | | | | | |
| c. Semantic Analysis | | | | | | | | | | | | | d. Code Generation | | | | | | | | |
| 3. | **Which of the following phase depends on machine?** | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a. Lexical Analysis | | | | | | | | | | | | b. Syntax Analysis | | | | | | | | | |
| c. Semantic Analysis | | | | | | | | | | | | d. Code Generation | | | | | | | | | |
| 4. | **Which of the following phase produces parse tree as output?** | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a. Lexical Analysis | | | | | | | | | | | b. Syntax Analysis | | | | | | | | | | |
| c. Coe optimization | | | | | | | | | | | d. Code Generation | | | | | | | | | | |
| 5. | **LEX tool used to genearate \_\_\_\_\_\_\_\_\_\_\_\_.** | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a. lexical  Analyzer | | | | | b. Syntax  Analyzer | | | | | | | | c. Semantic  Analyzer | | | | | | | d. Code Analyzer | |
| 6. | **Which of the following is a token?** | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a. Identifier | | | | | b. Keyword | | | | c. Operator | | | | | | | | | | | d. All | |
| 7. | **The regular expression a+ not generates \_\_\_\_.** | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a. a | | | | | b. aa | | | | | | | | c. € | | | | | | | d. All | |
| 8. | **Which of the following is lexical error?** | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a. a1 | | | | | b. 1a | | | | | | | | c. a | | | | | | | d. 1 | |
| 9. | **\_\_\_ is a translator.** | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a. Compiler | | | | | b. Interpreter | | | | | | | | c. Assembler | | | | | | | d. All | |
| 10. | **Find number of tokens in the following code: int x= =y;** | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a. 6 | | | | | b. 5 | | | | | | | | c. 4 | | | | | | | d. 3 | |
| 11. | **Lexical Analyzer groups the characters into meaningful sequences called \_\_.** | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a. Pass | | | | | b. Lexeme | | | | | | | | c. LEX | | | | | | | d. Phase. | |
| 12. | **The regular expression ab+ not generates \_\_\_\_.** | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a. abb | | b. a | | | | | | c. ab | | | | | | | | | d. abbbb | | | | |
| 13. | **A compiler can check** | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| 1. Logical Error | | | | | | | | 1. Syntax Error | | | | | | | | | | | | | |
| 1. Both Logical & Syntax Error | | | | | | | | 1. Not Logical & Syntax Error | | | | | | | | | | | | | |
| 14. | **Consider the following grammar S ->Ab A ->+ then FIRST(S) =\_\_\_\_.** | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a. **{+}** | | | | b. {a} | | | | | | | | | c. {$} | | | | | | d. {A} | | |
| 15. | **How many components a context free grammar has?** | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a. 2 | | | | | b. 3 | | | | | | | | c. 4 | | | | | | | d. 5 | |
| 16. | **A LEX program has \_\_\_\_\_\_\_\_ number of sections** | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a. 1 | | | | | b. 3 | | | | | | | | c. 2 | | | | | | | d. 4 | |
| 17. | **In Parse tree, leaf nodes are called?** | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a. Terminals | | | | | b. Non terminals | | | | | | | | c. Sub terminals | | | | | | | d. Half terminals | |
| 18. | **A bottom up parser generates** | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a. Right Most Derivation | | | | | | | | | | | | | b. Right Most derivation in reverse | | | | | | | | |
| c. Leftmost derivation | | | | | | | | | | | | | d. Leftmost derivation in reverse | | | | | | | | |
| 19. | **Shift reduce parsing belongs to class of** | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a. Bottom up parsing | | | | | | | b. Top down parsing | | | | | | | | | | | | | | |
| c. Recursive parsing | | | | | | | d. Predictive parsing | | | | | | | | | | | | | | |
| 20. | **The grammar E ->EaS | a is \_\_\_\_\_\_recursive.** | | | | | | | | | | | | | | | | | | | | | | **CO1** | **L2** |  |
| a . Left | | | b. Right | | | | | | | c. Left, right | | | | | | | | d. Not | | | |