

Roll No.

Total No. of Pages : 02

Total No. of Questions : 18

B.Tech. (CSE) PIT(Sem.-6)

COMPILER DESIGN

Subject Code : BTCS-601-18

M.Code : 79249

Date of Examination : 02-07-22

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

Write briefly :

1. Lexeme
2. Error
3. Three address code
4. Impact of empty entry in parsing table.
5. Type checking
6. NFA
7. Regular expression
8. Syntax tree
9. Context free grammar
10. Phase of a compiler.

SECTION-B

11. Write a note on input buffering.
12. How shift reduce parsing is performed on given below grammar, explain in detail.

$$S \rightarrow S + S$$

$$S \rightarrow S * S$$

$$S \rightarrow \text{id}$$

13. Differentiate between Parse tree and Syntax tree with the use of suitable example.
14. Explain the role of symbol table, symbol table management in compiler design.
15. Explain various issues of code generation in compiler design.

SECTION-C

16. Write a note on basic blocks and its optimization techniques.
17. Explain in detail the role of various phases of compiler with suitable example.
18. Explain in detail error handling mid recovery techniques available in compiler.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.