Roll No. | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (CSE) (Sem–6)

COMPILER DESIGN

Subject Code : BTCS-601-18

M.Code : 79249

Date of Examination : 09-06-2023

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

1. Write briefly :

a) Lexeme vs Token

b) Parse tree

c) Role of look ahead pointer in input buffering

d) What do you meant by an empty entity in the parsing table?

e) Phase *vs* Paas

f) Ambuiguis grammar

g) Left factor

S→iCtS | iCtSeS|a

C→b

h) Handle and Handle Pruning

i) Macro

j) Purpose of using Symbol Table

SECTION-B

2. Write a note on error handling and recovery techniques.

3. How LR(0) parsing is performed on the given below grammar, create its parsing table and explain in detail.

   E→ T+E/T

   T→ id

4. Explain in detail three address codes along with their implementation.

5. Explain in various data structures used for the symbol table.

6. Explain in detail how DAG is created for basic blocks using a suitable example.

SECTION-C

7. Explain the various code optimization techniques in detail using suitable examples.

8. How does a string position = initial+rate*60 pass through various compiler phases?

9. **Write a note on :**

   a) YACC

   b) Lex.

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.