## **Compiler Term Project** 30 Absolute Points

## **Develop Predictive Parser the following MINI C Language**

```
CProgram-->void main(){stmtSet }

stmtSet-->stmt;

|stmt;stemtSet

stmt--> decStmt | AS | CoutStmt | cinStmt

decStmt--> Type idSet

Type--> int

idSet-->id

|id,idSet

AS--> id=E

E--> E+E | E*E | (E) | id | intLiteral

coutStmt-->cout<<id

cinstmt--> cin >> id
```

## **Requirements:**

You need to submit the following items.

- 1- Lexical Specification
- 2- Transition Diagram
- 3- Transition Table
- 4- Lexical Analyze (C++ OR Java or any other language)
- 5- LA will out tokens into file Token.La
- 6- LL(1)Grammar
- 7- First and Follow Sets
- 8- Predictive parser Table
- 9- Parser Software using LL(1) approach (it will print parse tree in the form of productions)

Deadline 10<sup>th</sup> June 2021

Note: You all are requested to discuss your design and any confusion either sending email or WhatsApp message. Make sure you follow the deadline strictly; no late submissions will be entertained. Also avoid peer discussions and Help. The deadline for **first 5 items is June 3, 2021. 6 to 9 deadline is June 10.**