SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
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## ASSIGNMENT - II

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|---|---|---|
| **Program** | : B.E/B.Tech-CSE/IT | **Max. Marks: 15** |
| **Course** | : Compiler Design | **Course code:** SCS1303 |
| **Sem** | : V | **Batch** : 2018-2022 |

**Part-A(MCQ)**          **Answer ALL the questions**          **(5×1=5)**

1. The inclusion of Augmented rule in a SLR grammar aims at which action:
   a. Shift
   b. Reduce
   c. Error
   d. Accept
2. Every SLR grammar is unambiguous, but not every unambiguous grammar is SLR.
   a. True
   b. False
3. The Semantic Analysis helps in
   a. Type Checking
   b. Helps in generating Intermediate code
   c. Generates target code.
   d. Issues error messages
4. The attribute of a node that depends on the value of attributes of children node is called as-------------
   a. Inherited attribute
   b. Synthesized attribute
   c. Iterative attribute
   d. Translation attribute
5. A parse tree showing the values of attributes at each node is called -------------
   a. Syntax tree
   b. DAG
   c. Annotated Parse tree
   d. Control flow graph

**Part-B(Short Answers)**          **Answer ALL the questions**          **(5×1=5)**

1. Compare LL grammars with LR grammars.
2. Construct the operator Precedence table for id=*id
   (Use the grammar: S→L=R | R, L→*id | R, R→L)
3. Write short notes on precedence functions.
4. Differentiate a syntax tree from a parse tree.
5. List the types of Intermediate Code.

**Part-C(Long Answer)**          **Answer ALL the questions**          **(1×5=5)**

1. Consider the grammar:
   E→E+T | T
   T→T*F | F
   F→ (E) | id
   a. Construct LR(0) items for the SLR Parser.
   b. Construct the DFA for the items.