SRM Institute of Science and Technology

Department of Computer Science and Engineering

18CSC304J - COMPILER DESIGN

Unit 2

| **Duration (hour)** | | **Topic** | **Video Lecture Link** |
| --- | --- | --- | --- |
| S-1 | SLO-1 | Syntax Analysis Definition - Role of parser | https://youtu.be/70WkO0wQUWE |
| SLO-2 | Lexical versus Syntactic Analysis |  |
| S-2 | SLO-1 | Representative Grammars | https://youtu.be/grZvMHn2sC4 |
| SLO-2 | Syntax Error Handling |  |
| S-3 | SLO-1 | Elimination of Ambiguity, Left Recursion | https://youtu.be/grZvMHn2sC4 |
| SLO-2 | Left Factoring | https://youtu.be/ayKdH2E3QIM |
| S-4-5 | SLO-1 | Lab 4Elimation of Ambiguity, Left Recursion and Left Factoring |  |
| SLO-2 |  |
| S-6 | SLO-1 | Top down parsing |  |
| SLO-2 | Recursive Descent Parsing, back tracking | https://youtu.be/E0yoobLJiJE |
| S-7 | SLO-1 | Computation of FIRST | https://youtu.be/dDoo5BF9T4E |
| SLO-2 | Problems related to FIRST |
| S-8 | SLO-1 | Computation of FOLLOW |
| SLO-2 | Problems related to FOLLOW |
| S-9-10 | SLO-1 | Lab 5 -FIRST AND FOLLOW computation |  |
| SLO-2 |  |
| S-11 | SLO-1 | Construction of a predictive parsing table | https://youtu.be/QgpcZ825ddM, https://youtu.be/w0FgAAGJAqE |
| SLO-2 | Predictive Parsers LL(1) Grammars |
| S-12 | SLO-1 | Transition Diagrams for Predictive Parsers |  |
| SLO-2 | Error Recovery in Predictive Parsing |  |
| S-13 | SLO-1 | Predictive Parsing Algorithm |  |
| SLO-2 | Non Recursive Predictive Parser | https://youtu.be/j3scaOk15NQ |
| S-14-15 | SLO-1 | Lab 6 Predictive Parsing Table |  |
| SLO-2 |  |