VIT®
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

CSI1003- Formal Languages and Automata Theory

Digital Assignment

Due Date: 19-OCT-2020 **Max Marks: 10**

1. **Using MOD function with concept explanation for DFA .(6 questions each)**
2. **Divisible by number with concept explanation for DFA. .(6 questions each)**
3. **Divisible by binary number with concept explanation for DFA. .(6 questions each)**
4. **Regular language to Regular grammar vice versa with concept explanation.(6 questions each)**
5. **Regular expression to regular grammar vice versa with concept explanation.(6 questions each)**
6. **Arden's theorem Finite state machines to regular expression.(3 questions each)**
7. **Context free grammar to context free language vice versa.(6 questions each)**
8. **Ambiguous grammar .(6 questions each)**
9. **Simplification of context free grammar.(6 questions each)**
10. **Pushdown Automata.(6 questions each)**

*10 groups will be formed.

*Each group will have exactly 6 students.

*Group can made by yourself.

*If any group not filled with 6 students then I will allocate the student to the group which has less than six.

*Among 10 question one assignment question have to choose by a group. Same assignment question will not assigned to the other group.

*One assignment question refers to either 6 or 3 questions solved by individual student in a group.

*Students who are Copying from your group members or from internet will be awarded zero mark in digital assignment.