

# Department of Computer Science and Engineering

## Indian Institute of Technology, Kharagpur

### Compiler Theory: CS31003

3rd year CSE, 5th Semester

*Assignment - 3: Parsing*

Assign Date: September 23, 2020

Mode: Individual Submission

*Marks: 10*

Submit Date: 23:55, September 29, 2020

1. Write Postfix expression of the following infix expression.

$4 \times 1 = 4$

- a.  $a+b*c+(d*e)$
- b.  $a-b-c$
- c.  $a*(b+c)/d$
- d.  $(a+(b*c))/(d-e)$

2. Build the LR(0) parsing table and draw parse tree for the input  $w = abbcde$ .

$4 + 2 = 6$

S  $\rightarrow$  aABe  
A  $\rightarrow$  Abc / b  
B  $\rightarrow$  d

*Note: Please submit your answer handwritten in paper. Upload your answer in .pdf format in the moodle server. File name should be named as ass1-roll.pdf, where "roll" is your roll number.*