

CSE331: Automata and Computability

Total Marks: 20

Allocated Time: 30 minutes

Section: 01

Faculty: Farhan Feroz

Semester: Fall 2022

Obtained Marks

Name:

ID:

“Best of Luck”

Question 1: [5 Points]

Construct a Context-Free Grammar for the languages expressed by the following regular expression:
[Here, + means OR operation]

$$(a^*b^* + (ac + b^*c)b)^*$$

Question 2: [15 Points]

Draw a Pushdown Automata for the following Language:

$$L = \{w \in \Sigma^* : w = 0^n 1^m 0^k \text{ where } n = m \text{ or } m \neq k\}$$