

BRAC University
Dept. of Computer Science and Engineering
Fall 2024
CSE331-13
QUIZ - 1(A)

Time: 25 minutes

Marks: 20

Name:

ID:

Section:

1. Construct DFAs that recognize the following languages.
 - a. $L = \{ w \in \{a,b\}^* : w \text{ starts with even number of a's} \}$ 4
 - b. $L = \{ w \in \{0,1\}^* : \text{the length of } w \text{ is two more than the multiple of } 3 \}$ 6
2. Give regular expressions for the following languages.
 - a. $L = \{ w \in \{0,1\}^* : w \text{ contains exactly one '01' as a substring} \}$ 4
 - b. $L = \{ w \in \{a,b\}^* : w \text{ contains "abb" as a substring} \}$ 6