**BRAC University**

**Dept. of Computer Science and Engineering**

**Summer 2024**

**CSE331-04**

**QUIZ - 2(B)**

**Time: 25 minutes Marks: 20**

Name: ID: Section:

1. Give regular expressions for the following languages.
   1. L = { w ∈ {0,1}\* : w starts with “1011”} 6
   2. L = { w ∈ {0,1}\* : every ‘0’ is followed by two or less ‘1’s’} 5
   3. L = { w ∈ {a,b}\* : w contains exactly two ‘ba’s as a substring} 4
2. Convert the following regular expression over Σ = {0, 1} into an equivalent NFA. Note that R1 + R2 is the same as R1 ∪ R2. 5

01(0+010\*)\*1 + 1 + (1+0)1