**BRAC University**

**Dept. of Computer Science and Engineering**

**Summer 2024**

**CSE331-04**

**QUIZ - 3(A)**

**Time: 25 minutes Marks: 30**

Name: ID: Section:

1. Give a context-free grammar that generates the language **[7+8+8=23]**
   1. L = { w ∈ {0, 1, 2}\*: w = 1i0j2k, where j = 2i+k, i,k ≥0}
   2. L = { w ∈ {0, 1}\*: w contains at most two 1’s }
   3. L = { w ∈ {b}\*: w = bn,where n is a multiple of two.}
2. Convert the following regular expression into context free grammar. **[7]**

aa + (a+bc)\*cbb(cc+b)