3) ① $S \to Sc \mid Aa \mid c$

② $A \to Sa \mid Bb \mid a$

③ $B \to Sc \mid Bb$

① $S \to Sc \mid Aa \mid c \to S \to AaS' \mid cS'$

$S' \to cS' \mid \varepsilon$

② $A \to Sa \mid Bb \mid a \to A \to BbA' \mid aA' \mid cS'aA'$

$A' \to aS'aA' \mid \varepsilon$

③ $B \to Sc \mid Bb \to B \to ScB'$

$B' \to bB' \mid \varepsilon$

$S \to AaS' \mid cS'$

$S' \to cS' \mid \varepsilon$

$A \to BbA' \mid aA' \mid cS'aA'$

$A' \to aS'aA' \mid \varepsilon$

$B \to ScB'$

$B' \to bB' \mid \varepsilon$