

**CS 302
QUIZ 8***29 November 2017***ANSWERS**

(a) (4 pts) See slide set 8

(b) (6 pts) $L := (\omega \in \{a,b,c,d\}^ \mid \omega = a^n b^m c^m d^n, n, m \geq 0)$ IS a context-free language, generated by $G = (\{S, B\}, \{a, b, c, d\}, R, S)$ where*

$R : S \rightarrow a S d \mid B \mid e ; B \rightarrow b B c \mid B \mid e$