Re 3 Consider the followy grammer (S) (A) a (B) b (A) -1 (A) b|b (B) = a (B) a · baab · bbaaaaas · bbbab o bbaab S -> (A) a < B) b (ii) bbbab (t) 8 -> LAS a (B) b barB> b (A)6 a (B) b baab bba Not possible generated by granw

bbaaaaaS (iii) S -> LAY a (B) b-6 (A) (B) (B) DICADO + CADICA (Bb a Z 9) 9 b Not possible 66 a (B) 99 b proposit for drider. bbaaaaab Jemmorg 10 bbaab (iv) 5- 100 (B) LA) b bdooss . S -> < A> a < B) b Generated of gramm (Bba (a) b bbaab Consider the following gramm. (s) -) a (s) c (B) (A) b (A) -> c (A) C (B) -> d/(A)

(i) $s \rightarrow a \langle s \rangle c \langle s \rangle$ abcdusing grammon 5-> band (B) -> d accobd states and all the states and the states are (ii) $S \rightarrow a(s)c(3)$ using (s) -> (A) -> c(A) ac(A)cd from the state of the (B) -> d, acced. . Not possible with the gramma. (iii) accc bcc a < s > c < B > a < A > c < B >2 200000 (3) - As accedas accc x (a) scallo 6 C- (A) (O)) (A) 330 ! Not possible with grama.

iv acd s -> a <s> c < B> a \(\text{\$\geq} \)

.. Not porsible with grow

v) accc

 $S \rightarrow \alpha \langle S \rangle c \langle B \rangle$ $\alpha \langle A \rangle c \langle A \rangle$ $\alpha c c c c$

: Pomite with grand

very (s) -> (A)

(B) -1 (A)