18114083 Assignment -3 (a) and m n > 4, $m \leq 3$ (aaaa) a* (1+ b+ bb+ bbb) b) and m (n+m) is even. (aa)*a(bb)*b+(ag)*(bb)* (c) and m, n > 3, m is wen (aag)a* (bb)* d) and m n < 4, m < 3 (L+a+aa+aaa)(L+b+bb+bbb) (e) a bhw: n >,3 w & & 9,6 ft a(bbb) b* (a+b) (a+b)*) VWV: V, WEGa, 6/4, |V|=2

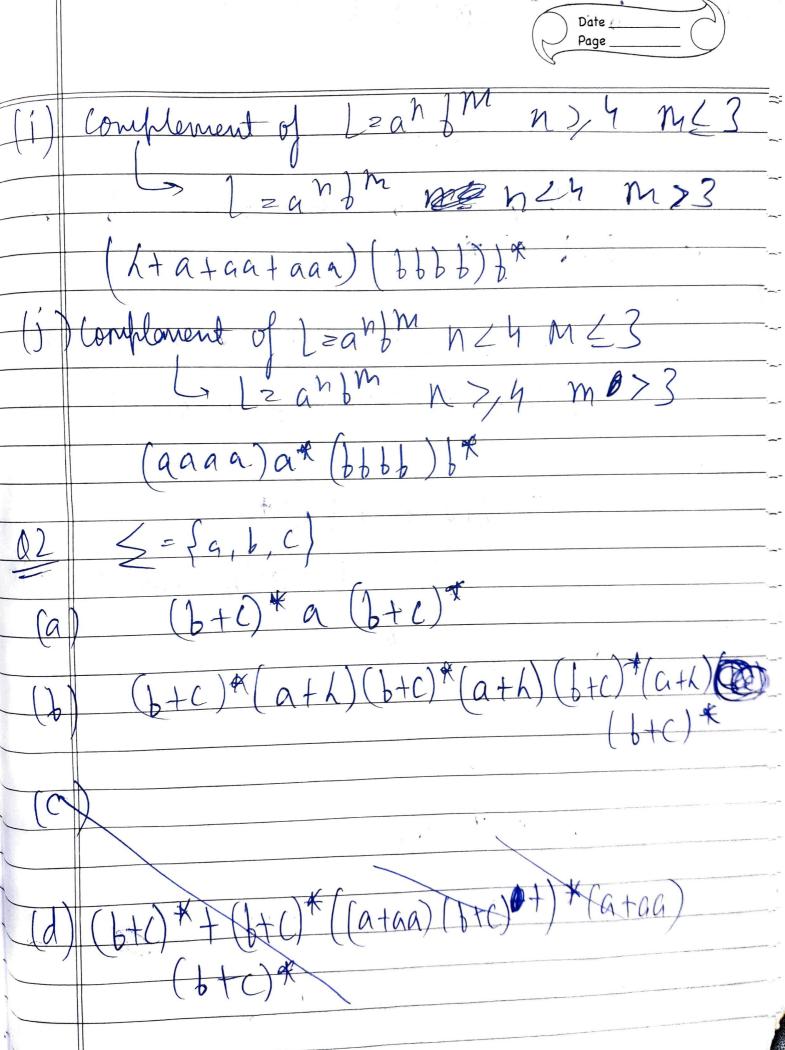
CS-2

classmate

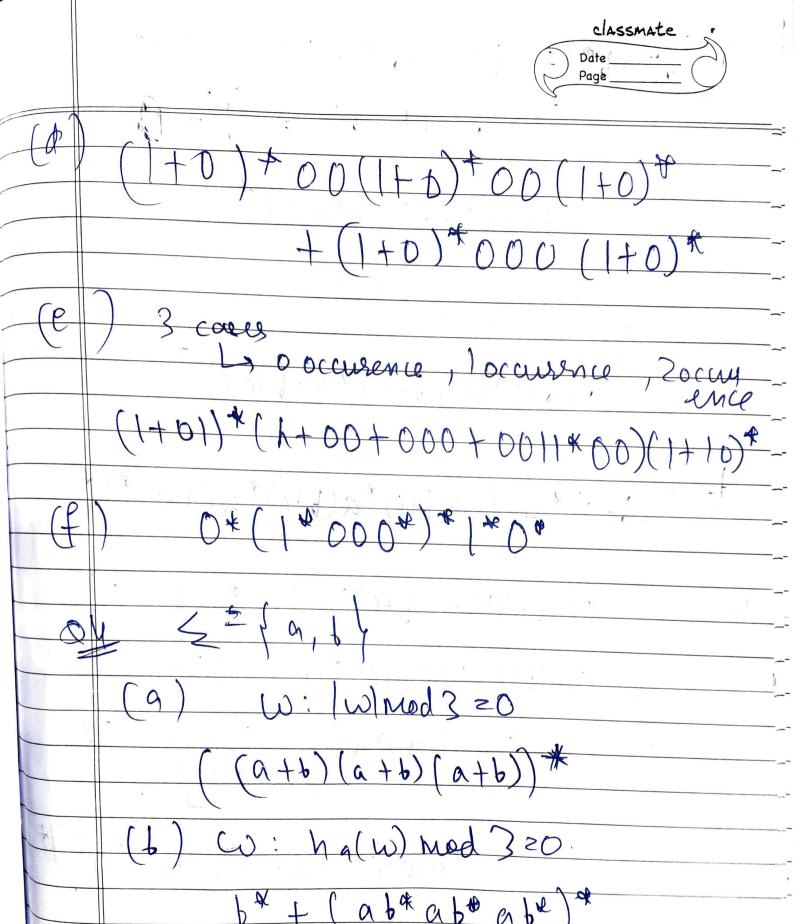
Yashaswi Jaiswal

w f (0,1)* (3) COLDA COLDA . T* (011+) +00(110+) +X (1+01)* 00 (10+1) (h) complement of a2h b2m+1, h>0, m>0 Al a26, a96 a66..., b, b3, 15, ... and the second second even powers of a and odd powers of b complement of odd powers of a & wan powers

2n 12m, m>0, n>0 U a 2n+1 12m m>0 €, a², a4, a6. b², b4, 16. , a²b² v a, a³, a € ab² anbem n=>0, m>,0 (a) * (bb) **



(P) (b+c)* ((aaa) (b+c)*)* (C) possible orders abe of eich + bactbeat cabtcha X = (a+1+c) * Xaxbxcx+ Xaxcxbx f Xbxaxc + XIXCXaX+XCXaXbX+ XCXbXaX (d) (b+c) * (h+a+aa)(b+c)* (b+c)(b+c)* (h+a+aa)(b+c)*)* (aga+b+c) 2 ≤ 2 $\{0,1\}$ (9) (0xt1) * 01 (0+1) × 0 + (0+1) × 11 + d = 0+1 1 + ((B O (D O) + 1 +



(1) W: ha(w) mod 5 >0