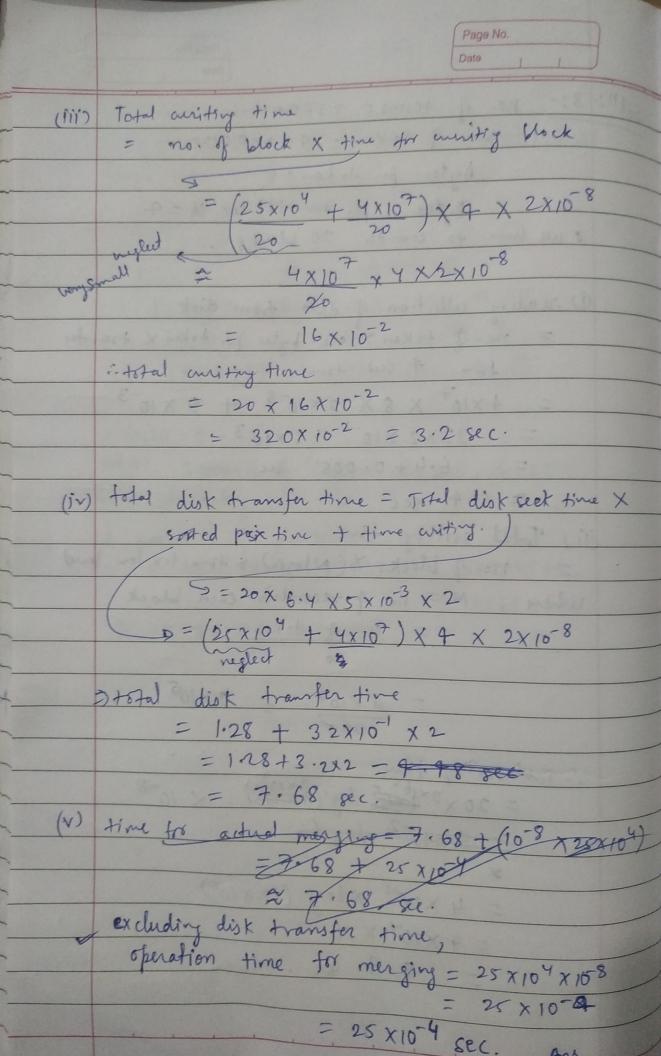
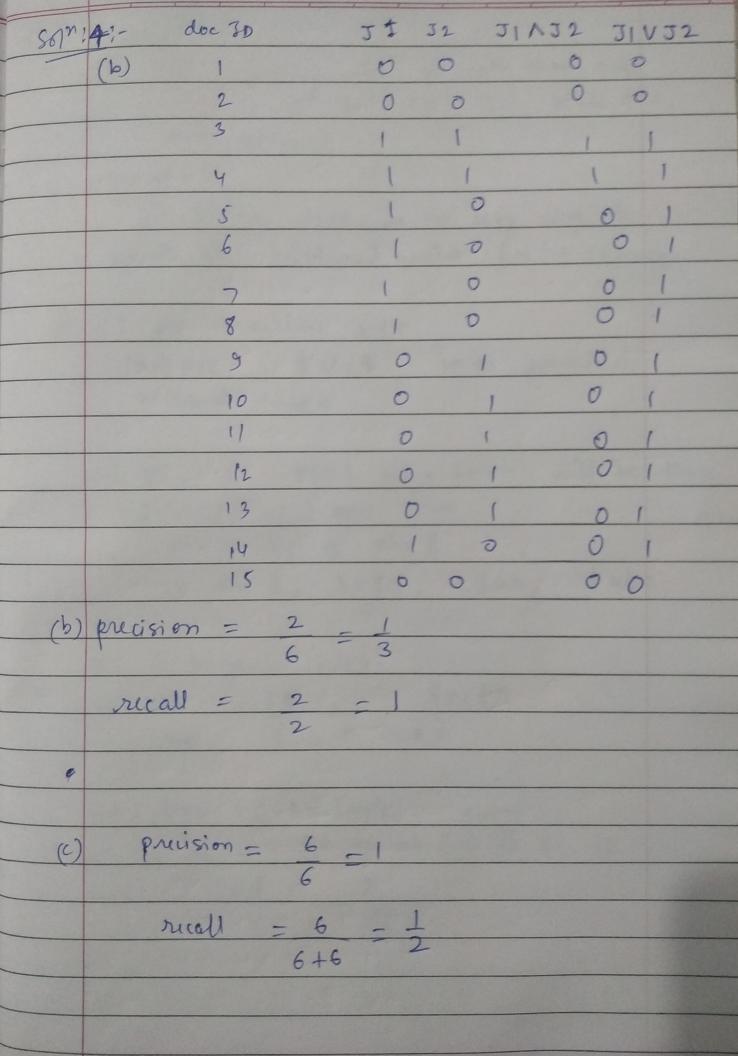
Name: Sumit Kumar Yadar Page No. Roll No .: - 18CS 30042 Soln: - 1: 776, 801, 1101, 3125 13 (i) variable byte Code: 776 (100001000) 10001000 now for gaps. 801-776=25 → 100011001 for gap. 1101-801 = 300 > 00000010 10101100 fr gap 312513-1101=311412 00010011 (0011\(\text{baccocoo}\) 0 0 0 0 0 0 0 0 0 1110100 (ii) gamma codes:-776, 25, 300, 311412 for 776: in binary 1(00001000) :. Pade: 111111110 100001000 for 25: in birary 1,1001, 4 code: 11110 1001 for 300: in binary 10010116.0. Y code: 11111111000101100 for 311412; binary: 1001100000001110100.  (b) Gamma-coded gept: 01111000010101011111001011101010111010111 break like this 1111000, > 4 111100011 => 10011 >> 19 101 > 11 => 3 111110 100111 > 110111 > 55 11010 3 110 > 6 1110111 = 1111 = 15 2. docJo = 0. now, sequence of Gaps 3,55,6,15 & first entry will be 19. & sequence of postings. 5 19, 19+3, 19+3+55, 19+3+55+6, 19+3+55+6+11 \$ 19,22,77,83,98. 000100001011111111

Soln: 3:- no. of terms = 250000 no. of to kens = 40,000,000 Bytes per to ken = 8 Bytes per termid | doc id = 4 e we have to consider 20 blocks. 1) reading collection of data from dirk = no. of to ken X are byter per token X transfer time of seek time  $= 4 \times 10^{7} \times 8 \times 2 \times 10^{-8} + 5 \times 10^{-3}$ = 32×2×10<sup>-1</sup> +5×10<sup>-3</sup> 6.4+0.005 su ≈ 6.4 sec (i) Total softing time = no. of blocks X (NlogN) \* time for low level where, N = no. of records in each block = no. of token  $=\frac{4\times107}{265}=\frac{2\times10^{6}}{2}$ : Total sorting time = 20 x 2×40 to log (2×105) × 10-8 = 8 × 10 - Log ( = 4 × 10 -1 × log (2×106) = 9×107×21 = 8.4 800.





	Page No. Date
801 m	- 21-
	(a) Adv: - lookup time is faster than tree
	(a) Adv: - looky time is faster than tree ie: it takes O(1) while tree
	take O(logn)
	Disad:-
	In hashing there is no easy way to
	In hashing there is no easy way to handle the high-cand queiros / pretix search
()	
(45)	(C) for searching red*
	i aill use \$ red * in as permuterm uildend index
	Midera index
	(b) There are O(n) extra ferm will be there
	by considering each term
	ex: abc 3 abc \$
	3 abc\$, bega, c\$ab, \$abc
	(d) fortrigram index.
	red*, Fred*
	red*, \$red*  (\$re \ red)
	(c) bon le bonboosic some
	ba ar ba an ab ba ar si ic
	Taccool = 2
	5
The second secon	