

24/08/23

S: No. 33

Analytical day-11

1-A) three address code .

1.  $t_1 = 0$

2.  $i = 0$

3.  $t_2 = i + 4$

4.  $t_3 = a[t_2]$

5.  $t_4 = b[t_2]$

6.  $t_5 = t_3 * t_4$

7.  $dp = dp + t_5$

8.  $i = i + 1$

9. goto 3.

→ jump to line 3 (4) repeat the loop-

Three address code  
(1) if  $(a < b)$  goto (3)

(2) goto (4)

(3) if  $(c < 0)$  goto (6)

(4)  $t = 0$

(5) goto (7)

(6)  $t = 1$

(7)

### 3. Generator three address code

$c = 0$

do

{

if  $(a < b)$  then

$x++$ ;

else

$x--$ ;

$c++$ ;

} while  $(c < 5)$

#### Ⓐ Three address code

1.  $c = 0$

2. if  $(a < b)$  goto (4)

3. goto (7)

4.  $T1 = x + 1$

5.  $x = T1$

6. goto (9)

7.  $T2 = x - 1$

8.  $x = T2$

9.  $T3 = c + 1$

10.  $c = T3$

11. if  $(c < 5)$  goto (2)

12.