Date 11-8-21
DELTA Pg No. 10

Tut-02

① (a) +8 = 01000

(b) −8 = 11000

(c) 165 = 01010010 1

(d) −165 = 11010010 1

② (a) 0001 1111 is the 2's complement Ans

(b) 1110 0101 → 1.001 1010 → 1's comp
+ 1
1001 1011 → 2's comp
Ans.

(c) 1111 0111 → 1000 1000
+ 1
1000 1001 → 2's comp
Ans.

③

	Sign magnitude	1's comp	2's comp
−127	11111111	10000000	10000001
−100	11100100	10011011	10011100

④ (a) 90 = 10010000 (8421)

(b) 115 = 000100010101

(c) 410 = 010000010000

(5.) (1) 589 = 0101 1000 1001

+199 = 0001 1001 1001

788 = 0111 0010 0010

7 2 2

+ 0110 0110

0111 1000 1000 Ans.

7 8 8

(2) 175 = 0001 0111 0101

+326 = 0011 0010 0110

501 = 0100 1001 1011

4 9 11

0110 0110 0110

1010 1111 0001

+1

1010 0000 0001

+1

1011 0000 0001

0001 0111 0101

0011 0010 0110

0100 1001 1011

4 9 11

0110

0100 1001 0001

+1

0100 1010 0001

4 10 1

0110

0100 0000 0001

+1

0101 0000 0001 Ans.

5 0 1