PRACTICAL-1

01) Convert $(1056)_{16}$ to $(?)_8$:

$\rightarrow (1056)_{16} \longrightarrow (?)_2$

1	0	5	6
0001	0000	0101	0110

$\downarrow$

$(0001000001010110)_2$

001	000	001	010	110
$\downarrow$	$\downarrow$	$\downarrow$	$\downarrow$	$\downarrow$
1	0	1	2	6

$\rightarrow (10126)_8$

02) $(11672)_8$ to $(?)_{16}$

$(11672)_8 \longrightarrow (?)_2$

1	1	6	7	2
$\downarrow$	$\downarrow$	$\downarrow$	$\downarrow$	$\downarrow$
001	001	110	111	010

$\downarrow$

$\underline{0010011101111010}$

001	0011	1011	1010
$\downarrow$	$\downarrow$	$\downarrow$	$\downarrow$
1	3	11	10

$11 = B \qquad 10 = A$

$\rightarrow (13BA)_{16}$

03) $(2724)_8 \longrightarrow (?)_{10}$

$\rightarrow 4\times8^0 + 2\times8^1 + 7\times8^2 + 2\times8^3 = (1492)_{10}$

04) $(3211)_4$ to $(?)_5$

$(3211)_4 \longrightarrow (?)_{10}$

$1\times4^0 + 1\times4^1 + 2\times4^2 + 3\times4^3$

$\Rightarrow 1 + 4 + 32 + 192$

$\Rightarrow (229)_{10} \longrightarrow (?)_5$

5	229	
5	45	4
5	9	0
5	1	4
	0	1

$\Rightarrow (1404)_5$

05) $(1001001100)_2 \rightarrow (?)_6$

1001001100

$\hookrightarrow (?)_{10}$

$\Rightarrow 2^0 \times 0 + 0 \times 2^1 + 1 \times 2^2 + 1 \times 2^3 + 0 \times 2^4 + 0 \times 2^5 +$

$1 \times 2^6 + 0 \times 2^7 + 0 \times 2^8 + 1 \times 2^9$

$\Rightarrow 0 + 0 + 4 + 8 + 0 + 0 + 64 + 512$

$= (588)_{10}$

$\hookrightarrow (?)_6$

6	588	
6	98	0
6	16	2
	2	4
	0	2

$\Rightarrow (2420)_6$