K. saipranay

1) i) $(2020)_{10}$ to $()_{16}$

16 | 2020
16 | 126 - 4
7 - 14

$= (7144)_{16}$

$= (7E4)_{16}$

ii) $(2020.65625)_{10}$

16 | 2020
16 | 126 - 4
7 - 14

$= (7E4)_{16}$

$0.65625 \times 16 = 10.5$

$0.5 \times 16 = 8$

$= (108)_{16}$

$= (A8)_{16}$

iii) $(172)_{10}$ to $()_{16}$

16 | 172
10 - 12

$= (10|12)_{16}$

$= (AC)_{16}$

iv) $(172.983)_{10}$

16 | 172
10 - 12

$= (AC)_{16}$

$0.983 \times 16 = 15.72$

$0.72 \times 16 = 11.5$

$0.5 \times 16 = 8$

$= (15118)_{16}$

$= (D98)_{16}$

$(172.983)_{10} = (AC.D98)_{16}$

2) $(49)_{10}$ to $()_{16}$

16 | 49
3 - 1

$= (31)_{16}$

3) $(112810)_{10}$ to $()_{16}$

16	112810	
16	7050	- 10
16	440	- 10
16	27	- 8
	1	- 11

$(1111010)_{16}$

$= (1B8AA)_{16}$

4) $(60010)_{10}$ to $()_{16}$

16	60010	
16	3750	- 10
16	234	- 6
	14	- 10

$(14106 10)_{16}$

$= (EA6A)_{16}$

5) $(1542)_{10}$ to $()_{16}$

16	1542	
16	96	- 6
	6	- 0

$(606)_{16}$

6) Hexadecimal equivalent of $(175)_{10}$

16	175	
	10	- 15

$(1015)_{16} = (AF)_{10}$

7) i) $(105)_{10}$ to $()_{16}$

16	105	
	6	- 9

$(69)_{16}$

ii) $(450)_{10}$ to $()_{16}$

16	450	
16	28	- 2
	1	- 12

$(1122)_{16} = (1C2)_{16}$.

iii) $(199)_{10}$ to $()_{16}$

16	199	
	12	- 7

$(127)_{16}$

$= (C7)_{16}$

iv) $(3000)_{10}$ to $()_{16}$

16	3000	
16	187	- 8
	11	- 11

$(11118)_{16}$

$= (BB8)_{16}$

8) i) $(1032)_{10}$ to $(\ )_8$

8	1032	
8	123	- 2
8	16	- 1
	2	

$(212)_8$

ii) $(1032.6875)_{10}$ to $(\ )_{10}$

8	1032	
8	123	- 2
8	16	- 1
	2	

$= (212)_8$

$0.6875 \times 8 = 5.5$

$0.5 \times 8 = 4$

$= (54)_8$

$(1032.6875)_{10} = (212.54)_8$

iii) $(172)_{10}$ to $(\ )_8$

8	172	
8	21	- 4
	2	- 5

$= (254)_8$

10) $(172.872)_{10}$ to $(\ )_8$

8	172	
8	21	- 4
	2	- 5

$= (254)_8$

$0.872 \times 8 = 7.02$

$0.2 \times 8 = 1.6$

$(71)_8$

$= (254.71)_8$

9) $(127)_{10}$ to $(\ )_8$

8	127	
8	15	- 7
	1	- 7

$(177)_8$

12) IP address Identification.

i) 10.250.1.1 → Belongs to class A

ii) 193.42.1.1 → Belongs to class B

iii) 249.240.8.78 → Belongs to class E

iv) 215.45.45.0 → Belongs to class C

v) 33.0.0.0 → Belongs to Class A

vi) 158.98.80.0 → Belongs to class B