

API - 2016/12

$$\textcircled{2} a) (1^9 0^6 0^4 0 1 1 1 . 0 1 1)_2 = 512 + 64 + 16 + 7 + 0.25 + 0.125 \\ = (599.375)_{10} = (257.6)_{16}$$

$$b) (12202022201210212.01221622021)_3 = \\ = (182281725.183823)_9$$

$$c) (660457)_8 = (?)_6 = (4425223)_6$$

$$\begin{array}{r} 660457_8 \div 6 = 110062 \text{ R } 1 \\ \begin{array}{r} 110062_6 \div 6 = 18343 \text{ R } 4 \\ \begin{array}{r} 18343_6 \div 6 = 3057 \text{ R } 3 \\ \begin{array}{r} 3057_6 \div 6 = 509 \text{ R } 3 \\ \begin{array}{r} 509_6 \div 6 = 84 \text{ R } 5 \\ \begin{array}{r} 84_6 \div 6 = 14 \text{ R } 0 \\ \begin{array}{r} 14_6 \div 6 = 2 \text{ R } 2 \\ \begin{array}{r} 2_6 \div 6 = 0 \text{ R } 2 \end{array} \end{array} \end{array} \end{array} \end{array} \end{array} \end{array}$$

$$d) (7576045.1457)_8 =$$

$$= (111101111110000100101.001100101111)_2 = \\ = (13233300211.030233)_4 = (1EFC25.32F)_{16}$$

$$e) (DA94E.8CB)_{16} = (3122211032.203023)_4$$

$$= 11011010100101001110.100011001011)_2 = \\ = (3324516.4313)_8$$

$$\begin{array}{r}
 \text{③ a) } \overset{1111111111}{\text{FDEDBEC.BDE7}}_{16} \\
 + \text{EFDD83C.DBEA}_{16} \\
 \hline
 (\text{1EDCB728.99D1})_{16}
 \end{array}$$

$$\begin{array}{r}
 \text{b) } 70000210.0301_9 \\
 - 67857187.76487_9 \\
 \hline
 (1032011.15412)_9
 \end{array}$$

$$\begin{array}{r}
 \text{c) } 1010200.071_{16} \\
 - \text{FEC5BD.9DBE}_{16} \\
 \hline
 (23C42.6952)_{16}
 \end{array}$$

$$\begin{array}{r}
 \overset{101010101011101011011}{\text{d) } 1111011101.1011}_2 \\
 1110111001.11101_2 \\
 + 1101111011.10111_2 \\
 \hline
 (101100010011.01010)_2
 \end{array}$$

$$\begin{array}{r}
 \text{e) } 1010001001.0001_2 \\
 - 111011101.10111 \\
 \hline
 (10101011.01011)_2
 \end{array}$$