

## CACULATION:-

①  $V = 3$

by ohm's law,

$$I = V/R = 3/3 \times 10^3 \text{ A}$$
$$= 10^{-3} \text{ A} = 1 \text{ mA}$$

$$V_1 = 1 \text{ k}\Omega \times 1 \text{ mA} = 1 \text{ V}$$

$$V_2 = 1 \text{ k}\Omega \times 1 \text{ mA} = 1 \text{ V}$$

$$V_3 = 1 \text{ k}\Omega \times 1 \text{ mA} = 1 \text{ V}$$

$$V = V_1 + V_2 + V_3 = 1 + 1 + 1 = 3$$

②  $V = 5$

$$I = V/R = \frac{5}{3 \times 10^3}$$

$$= 1.6 \text{ mA}$$

$$V_1 = 1 \text{ k}\Omega \times 1.6 \text{ mA}$$

$$= 1.6 \text{ V}$$

$$V_2 = 1.6 \text{ V}, V_3 = 1.6 \text{ V}$$

$$V = V_1 + V_2 + V_3$$

$$V = 1.6 + 1.6 + 1.6 =$$

$$V = 4.8 \text{ V}$$