

1) a) Given,

Rate of interest = 20%

Interest = 2000 tk

Time = 1 years

We know,

$$\begin{aligned}\text{Principal} &= \frac{\text{Interest} \times 100}{\text{Rate of Interest} \times \text{Time}} \\ &= \frac{2000 \times 100}{20 \times 1} \text{ tk} \\ &= 10000 \text{ tk}\end{aligned}$$

Ans: 10000 tk

b) The principal and interest in total = (10000+2000) tk
= 12000 tk

Ans: 12000 tk

c) Given,

Rate of interest = 15%

Time = 1 year

From 'a' we get, Principal = 10000 tk

We know,

$$\begin{aligned}\text{Interest} &= \frac{\text{Principal} \times \text{Rate of Interest} \times \text{Time}}{100} \\ &= \frac{10000 \times 15 \times 1}{100} \\ &= 1500 \text{ tk}\end{aligned}$$

Ans: 1500 tk

2. a) Annual Interest = $\frac{\text{Principal} \times \text{Rate of Interest} \times \text{Time}}{100}$

b) Given,

$$\text{Principal} = 4500 \text{ tk}$$

$$\text{Rate of interest} = 8 \%$$

$$\text{Time} = 8 \text{ years}$$

We know,

$$\begin{aligned}\text{Interest} &= \frac{\text{Principal} \times \text{Rate of Interest} \times \text{Time}}{100} \\ &= \frac{4500 \times 8 \times 8}{100} \text{ tk} \\ &= 2880 \text{ tk}\end{aligned}$$

Ans: 2880 tk

c) Given,

Principal = 4500 tk

From 'b' we get,

He would pay back as interest after 8 years = 2880 tk

He would pay back in total after 8 years = $(4500+2880)$ tk
= 7380 tk

Ans: 7380 tk