

سوال ۲ الف

$$(10001011)_2 \xrightarrow{1's \text{ complement}} (01110100)_2 = -114$$

$\begin{matrix} \downarrow & \downarrow & \downarrow & \downarrow \\ 4 & 8 & 16 & 32 \end{matrix}$

+4

ب

$$(10001011)_2 \xrightarrow{2's \text{ complement}} (01110101)_2 = -117$$

$\begin{matrix} \downarrow & \downarrow & \downarrow & \downarrow \\ 4 & 8 & 16 & 32 \end{matrix}$

+4

ج

$$(10001011)_2 \Rightarrow (1000)_2 = 8 \Rightarrow (8 \times 8)_{10} = 64$$

$$(01011)_2 = 0 \times 8 + 1 \times 4 + 0 \times 2 + 1 \times 1 = 5$$

+6

د

$$(10001011)_2 \xrightarrow{2's \text{ complement}} (01110101)_2 = (-3.92424)_{10}$$

$\begin{matrix} \downarrow & \downarrow & \downarrow \\ 4 & 8 & 16 \end{matrix}$

+6