

Q. Post-fix expression:-

① 2, 3, 4 * +

$$\begin{array}{|c|} \hline 1 \\ \hline 2 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 3 \\ \hline 2 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 4 \\ \hline 3 \\ \hline 2 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 12 \\ \hline 2 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 14 \\ \hline \\ \hline \end{array} = \boxed{14}$$

2 3 4 * +

② 5, 1, 2 + 4 * + 3 -

$$\begin{array}{|c|} \hline 5 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 1 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 2 \\ \hline 1 \\ \hline 5 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 3 \\ \hline 5 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 4 \\ \hline 3 \\ \hline 5 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 12 \\ \hline 5 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 17 \\ \hline \\ \hline \end{array} \quad \begin{array}{|c|} \hline 3 \\ \hline 17 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 14 \\ \hline \\ \hline \end{array}$$

5 1 2 + 4 * + 3 -

= $\boxed{14}$

③ 3, 4, 2, +, * 5 -

$$\begin{array}{|c|} \hline 3 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 4 \\ \hline 3 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 2 \\ \hline 4 \\ \hline 3 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 6 \\ \hline 3 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 18 \\ \hline \\ \hline \end{array} \quad \begin{array}{|c|} \hline 5 \\ \hline 18 \\ \hline 5 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 13 \\ \hline \\ \hline \end{array} = \boxed{13}$$

3 4 2 + * 5 -

④ 3, 4, *, 2, 5, *, +, *

$$\begin{array}{|c|} \hline 3 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 4 \\ \hline 3 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 12 \\ \hline \\ \hline \end{array} \quad \begin{array}{|c|} \hline 2 \\ \hline 12 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 5 \\ \hline 2 \\ \hline 12 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 10 \\ \hline 12 \\ \hline \end{array} \quad \begin{array}{|c|} \hline 22 \\ \hline \\ \hline \end{array} = \boxed{22}$$

3 4 * 2 5 * + *

$$⑤ \quad 7, 8, + 3, 2 + 1$$

$$\begin{array}{|c|} \hline 7 \\ \hline \end{array}
 \begin{array}{|c|} \hline 8 \\ \hline \end{array}
 +
 \begin{array}{|c|} \hline 3 \\ \hline \end{array}
 \begin{array}{|c|} \hline 2 \\ \hline \end{array}
 +
 \begin{array}{|c|} \hline 1 \\ \hline \end{array}
 =
 \begin{array}{|c|} \hline 13 \\ \hline \end{array}$$