① Which of the following is Tautology.

(A) $p \vee q \rightarrow p$

(B) $p \vee (q \rightarrow p)$

(C) $p \vee (p \rightarrow q)$

(D) $p \rightarrow (p \rightarrow q)$

(A) $p \vee q \Rightarrow p$

$(p \vee q) \to p$	$\Rightarrow$	$(p \vee q) \to p$
		T f
$A \to p$		$T \to f$
T f		f

Not tautology.

(13) $p \vee (q \to p)$ $p \vee (q \to p)$

$f \vee f$ $f \vee (T \to f)$

$f \vee f$ $f \vee f$

f f

Not Tautology

① $p \vee (p \to q)$

$f \vee (f \to T)$

$f \vee (T)$

T

② $f \vee (f \to f)$

$f \vee T$

T

③ $T \vee (T \to f)$

$T \vee f$

T

$p \vee (p \to q)$

$f \vee f$

f

This is a tautology.

(d) $p \rightarrow (q \rightarrow p)$

$A \rightarrow B$	$T \rightarrow (T \rightarrow f)$
$T \rightarrow f$	$T \rightarrow f$
(f)	f

Not a tautology