Question #69045, Chemistry / Organic Chemistry
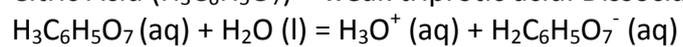
The question is one working out the equilibrium expression for some acids.

Citric Acid ($H_3C_6H_5O_7$)
Ka = $7.1x10^{-4}$

Answer :
Citric Acid ($H_3C_6H_5O_7$) – weak triprotic acid. Dissociation equation
$H_3C_6H_5O_7$ (aq) + H_2O (l) = H_3O^+ (aq) + $H_2C_6H_5O_7^-$ (aq)

$$K_a = \frac{[H_2C_6H_5O_7^-][H_3O^+]}{[H_3C_6H_5O_7]}$$