A. **pH Titration Plot**: Use Excel or another graphing program to generate a pH-titration graph (pH plotted as a function of mL of NaOH added). On this graph, clearly indicate the mL of NaOH needed to reach the equivalence point.

B. **Molecular Weight**

Neutralization point: ____________ mL (from plot)

moles of OH\(^{-}\)(aq) added at the neutralization point: ____________

\[ \text{g of weak acid weighed out: } \] ____________ g

\[ \text{g of weak acid in titrated sample: } \] ____________ g

\[ \text{molecular weight of weak acid: } \] ____________ g/mole

C. **Estimation of pK\(_a\)**

From pH titration curve: ____________

From half-titrated samples: ______  _______  _______  _______

mean value from half-titrated samples: _________________

D. **Identification of unknown**: ________________________________
(Choose from Table 1)