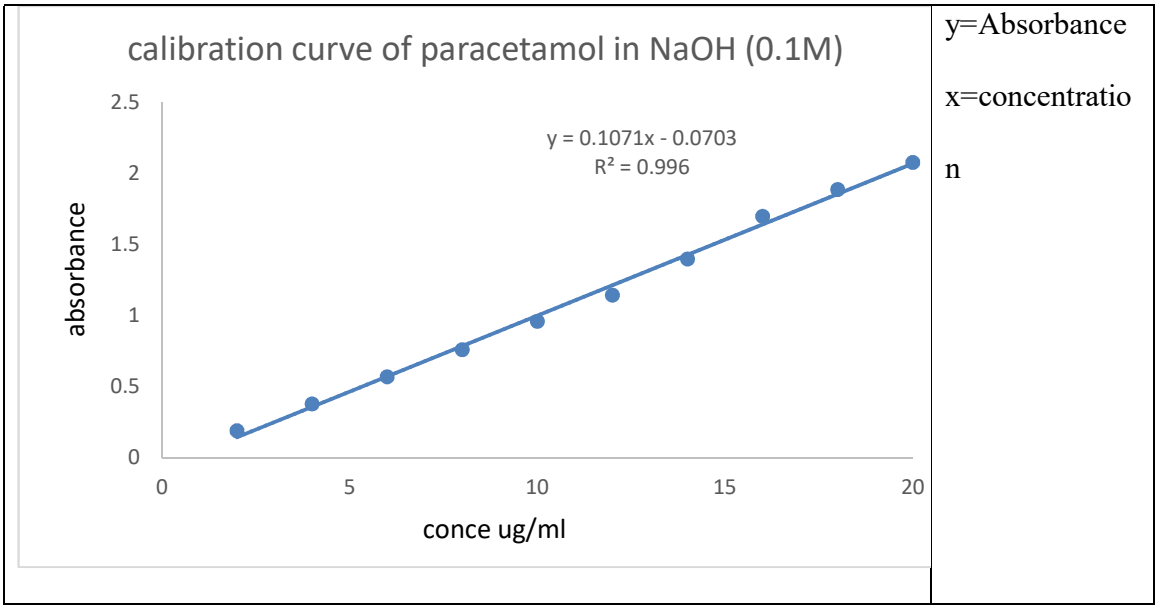
Industrial pharmacy-II lab#11, measurement of content uniformity of paracetamol spectrophotometrically

1. Select randomly a 10 tablets-sample, grind them and transfer an equivalent weight of 100 mg of active ingredient into 100 ml volumetric flask.
2. Dissolve in 100ml (0.1M) NaOH and sonicate for 5 minutes.
3. Filter the resultant solution.
4. Dilute 1 ml of filtrate up to 100 ml with water.
5. Measure the absorbance of the resulting solution at 257 nm, using 0.001 M Sodium Hydroxide as blank.
6. Use the calibration curve below to calculate the recovered concentration of paracetamol.



7. use dilution factor (50,000)to calculate the amount of active ingredients in each tablet recovered amount of active ingredient =(recovered concentration in ug)*dilution factor
8. Compare the recovered amount of active ingredient the allowed deviation percentage which stated in USP. (the allowed percentage is ±5% of the stated potency)