

### **Chemicals:**

- 1) FA 1 – 2M NaOH(aq) mix with 1M HNO<sub>3</sub> – 10 cm<sup>3</sup> per student [for QA]
- 2) FA 2 – 1.20 mol dm<sup>-3</sup> oxalic acid, HOOC-COOH(aq) – 100 cm<sup>3</sup> per student
- 3) FA 3 – 2.20 mol dm<sup>-3</sup> sodium hydroxide, NaOH(aq) – 120 cm<sup>3</sup> per student
- 4) Thymol blue indicator
- 5) FA 4 – saturate salicylic acid in water, filter and use filtrate – 10 cm<sup>3</sup> per student [for QA]

### **Apparatus:**

- 1) Deionised Water Bottle x 1 per student
- 2) Retort Stand w White Base x 1 per student
- 3) 50 cm<sup>3</sup> Burette x 1 per student
- 4) 10 cm<sup>3</sup> Pipette x 1 per student
- 5) Pipette Filler x 1 per student
- 6) Funnel x 1 per student
- 7) 250 cm<sup>3</sup> Beaker x 1 per student
- 8) 250 cm<sup>3</sup> Conical flask x 2 per student
- 9) Styrofoam Cup x 2 per student [no need lid]
- 10) 0.2 °C Thermometer x 1 per student
- 11) Test-tube x 4 per student
- 12) Boiling tube x 1 per student
- 13) Bunsen Burner and lighter x 1 per student
- 14) Droppers x 6 per student
- 15) Wooden tongs
- 16) Hot water bath (250 cm<sup>3</sup> Beaker)
- 17) QA bench reagents [main ones needed are: UI paper, silver nitrate, ammonia, aluminum foil, sodium hydroxide, aq iodine, aq bromine, neutral FeCl<sub>3</sub>, Fehling's A & B separate 5cm<sup>3</sup> each]
- 18) Waste beaker with lid [for organic QA] x 1 per student [labelled waste]