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**CEKENAS END OF TERM 2 EXAM-2022**

**FORM FOUR**

***Kenya Certificate of Secondary Education. (K.C.S.E)***

***CHEMISTRY 233/3***

***PAPPER 3***

***CONFIDENTIAL***

* Solution A-120cm3
* Solution C -60cm3
* 5cm3 of absolute ethanol
* About 0.5gms NaHCO3
* About 0.2g solid E
* About 1g solid P
* Pipette
* Pipette filler
* 250ml volumetric flask
* Means of labelling
* Burette
* Filter funnel
* Conical flasks – 2pcs
* 100 ml plastic beaker
* Thermometer
* 20ml syringe
* Boiling tube -2pcs
* Filter paper -2pcs
* 6 test tubes in a rack
* Wooden splint
* Distilled water in wash bottle
* Metallic spatula
* Test tube holder

**Access to;**

* Phenolphthalein indicator
* Source of heat
* 2M NH3
* 2M HCl
* Ba(NO3)2
* Universal indicator and pH chart

**Preparation of solutions**

* Solution A -0.8 M NaOH
* Solution C -1M H2SO4
* Solid P –mixture of ZnCO3 and ZnSO4 in the ratio 2:1
* Solid E is 0.2 grams Maleic acid