

MOKASA I JOINT EXAMINATIONS 2020

CHEMISTRY PAPER 3 CONFIDENTIAL

In addition to the common laboratory apparatus and fittings, each candidate shall be supplied with the following

- 60 cm³ of 0.5M copper (II) sulphate labeled *solution K*
- 2.5g of *Solid L*
- 90cm³ of acidified potassium manganate(VII), labelled as *Solution M*
- 60 cm³ of 2M sulphuric (VI) acid, H_2SO_4
- 2ml of *solution X*
- 2ml of *solution Y*
- 2ml of *solution Z*
- About 8 cm³ of *Liquid E* in a stoppered test tube
- About 2g of *solid Q* in a stoppered container
- Burette
- Pipette and pipette filler
- Three conical flasks
- 10ml measuring cylinder.
- 250 ml plastic beaker
- 250 ml volumetric flask with a stopper
- 1 label
- Stop watch
- Clean glass rod/looped nichrome wire
- Clean and dry Metallic spatula
- Thermometer (-10-110⁰c)
- four test tubes
- test tube holder
- Filter paper
- Filter funnel
- Retort stand
- white tile
- 10ml measuring cylinder.
- 50ml measuring cylinder.

Access to the following:

- Distilled water
- Bunsen burner
- Acidified potassium dichromate (VI) supplied with a dropper.
- 2M Barium nitrate solution supplied with a dropper.
- 2M lead (II) nitrate supplied with a dropper
- 2M Nitric (V) acid supplied with a dropper
- Sodium hydrogen carbonate solid supplied with a spatula

Note

- Solid Q is Na_2SO_3
- Liquid E is ethanol
- Solution K is prepared by accurately weighing 125g of hydrated copper (II) sulphate and making up to 1000 cm³ of solution
- Solution M is prepared by accurately weighing 3.2g of KMnO_4 . then dissolving in 100ml of 2M sulphuric acid and topping up to 1000ml of the solution
- Solution X is 2M potassium nitrate
- Solution Y is made by dissolving One Spatulaful of *blue Toss* detergent in 100ml of *distilled water (do not use tap water)* then *filter*
- Solution Z is 2M copper (II) sulphate solution