

NANDI EAST, NANDI SOUTH & TINDERET SUB-COUNTIES JOINT EVALUATION 2016**233/3****CHEMISTRY PRACTICAL****JULY / AUGUST 2016****CONFIDENTIAL INSTRUCTIONS TO SCHOOLS**

Each student should have the following:-

1. 100cm³ of solution B.
 2. 80cm³ of solution A.
 3. Pipette (25ml)
 4. Burette (50ml) in a retort stand.
 5. Methyl orange indicator with a dropper.
 6. Two conical flasks.
 7. Filter funnel
 8. Measuring cylinder (10ml)
 9. Measuring cylinder (50ml)
 10. Thermometer (-10 to 110°C)
 11. 100ml beaker preferably plastic.
 12. Stopwatch / clock
 13. 2 Labels
 14. 100ml Hydrogen peroxide solution D
 15. 50cm³ of solution C.
 16. 50cm³ of solution E.
 17. 30cm³ of starch solution K.
 18. Liquid P (about 10ml ethanol)
 19. Wooden splint
 20. Solid M (1cm piece of magnesium ribbon)
 21. Test tube rack
 22. Six test tubes
 23. Two boiling tubes
 24. 6g of solid L (prepared by mixing ammonium sulphate and aluminium sulphate in the ratio 1:1 i.e. 2g of ammonium sulphate and 2g of aluminium sulphate)
 25. Pieces of blue and red litmus paper.
 26. Distilled water in a wash bottle.
 27. A metallic spatula.
 28. About 1g of sodium hydrogen carbonate.
- Students should have access to:-***
- (a) Acidified potassium chromate (VI)
 - (b) Ethanoic acid
 - (c) 1M sulphuric (VI) acid with a dropper
 - (d) Source of heat
 - (e) 1M barium nitrate solution with a dropper
 - (f) 1M nitric acid
 - (g) 1M lead II nitrate with a dropper
 - (h) 1M ammonia solution with a dropper
 - (i) 1M potassium iodide solution with a dropper

NOTE: HOW TO PREPARE SOLUTIONS

- Hydrogen peroxide is prepared by measuring accurately using a clean measuring cylinder 100cm³ and 100 volume of hydrogen peroxide and add 900cm³ of distilled water to make a litre of solution.
- Potassium iodide is prepared by weighing accurately 8.3g and dissolve in 200cm³ of distilled water and make the mark to 1 litre of solution.
- Sodium thiosulphate (Na₂S₂O₃) 0.1M is prepared by weighing accurately 15.8g and dissolve in 200cm³ of distilled water and make the mark to 1 litre.
- Solution B is 1M HCl.
- Starch solution is prepared by dissolving 20.0g of starch powder in 100cm³ of distilled water.
- Solution A is prepared by mixing 53g of sodium carbonate and 42g of sodium chloride and dissolved in one litre of distilled water.
- Solution B is 1M hydrochloric acid.