1. Glass pipette

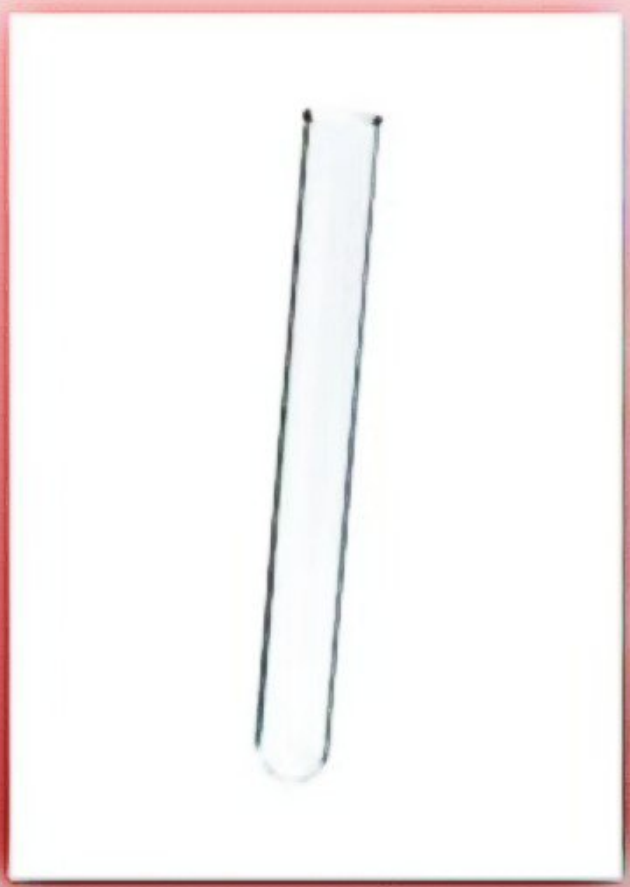
- to transport a measured volume of liquid
- 2ml, 5ml, 10ml
- presume tip as 1ml

2. Funnel

- plastic
- used to transfer liquids into containers that have narrow mouth
- can also be used a filter, when filter paper is used with it

3. Borosilicated test tube

- heat resistant
- 13ml
- used for performing experiments



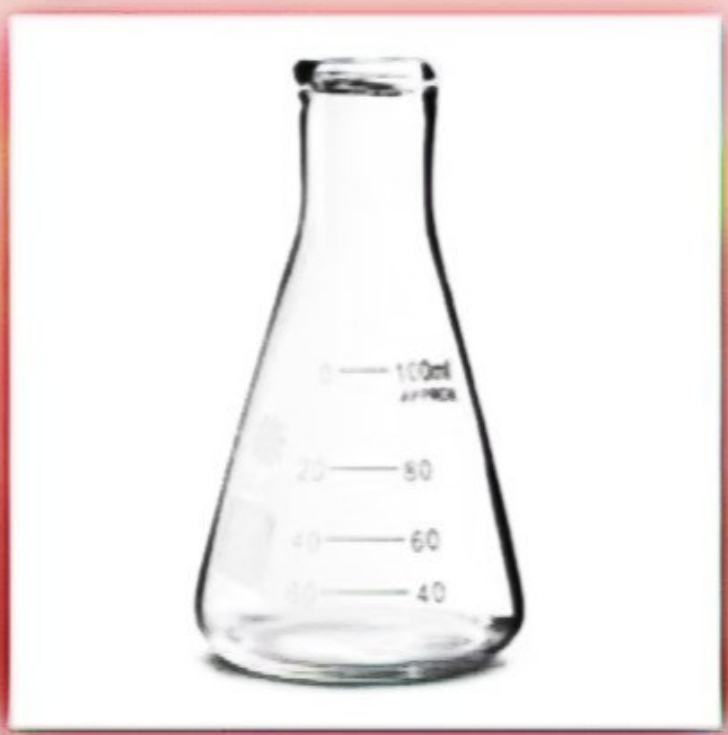
5. Test tube holder

- wood and metal
- has lock and key

6. Borosilicated conical flask

- graduated
- heat resistant
- used for experiments
- put it in a stand

with a mesh and
spirit lamp below



7. Borosil glass beaker

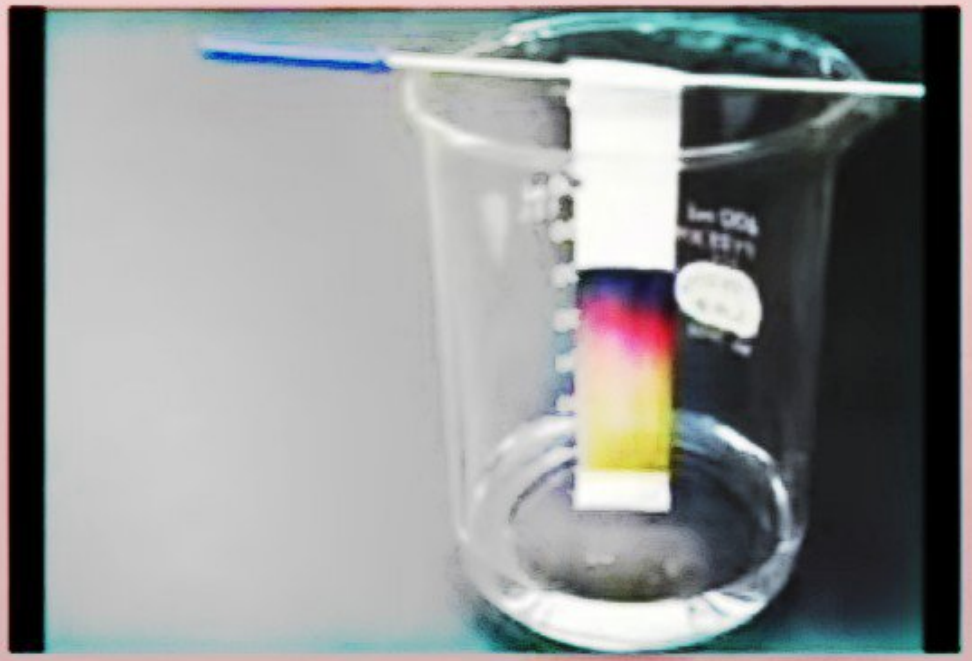
- hold, mix and heat reagents
- 50ml, 100ml, 80ml, 200ml, 500ml, 1000ml, 2000ml

8. Glass measuring cylinder

- 25ml,50ml, 100ml, 1000ml
- A graduated cylinder / cylinder measuring / mixing cylinder is used to measure the volume of a liquids, chemicals or solutions

9. Paper chromatography

- substances are distributed between a stationary phase and a mobile phase.When a coloured sample is placed on a filter paper, the colours separate from the sample by placing one end of the paper in a solvent



11. Spatula

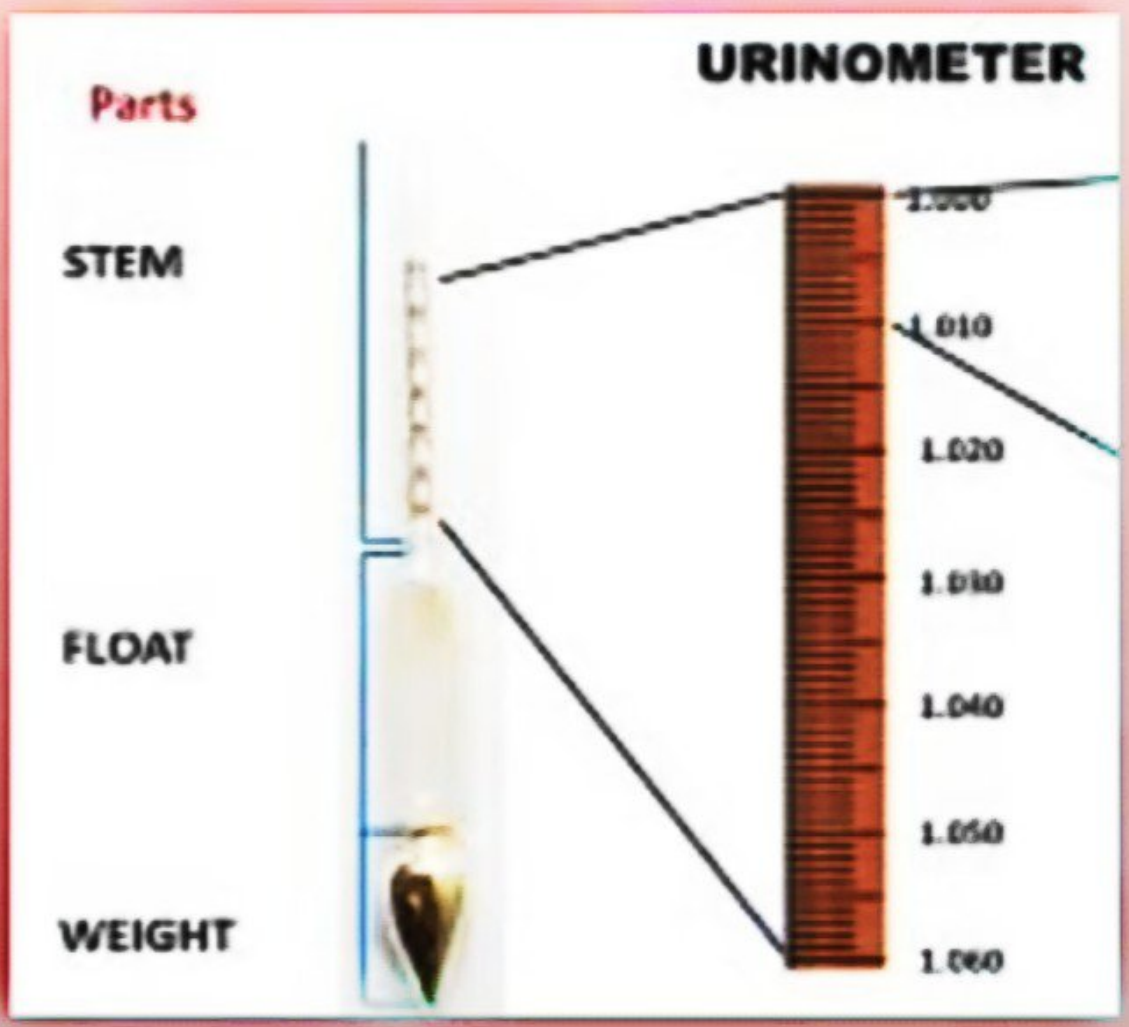
- steel
- used to take reagent and mix in test tube

10. Litmus paper

- test both for neutral
- red to blue (basic)
- blue to red (acidic)

12. Urinometer

- works on principle of buoyancy/ upward thrust
- used to measure specific gravity of urine
- add 0.001 to 16° (move every 3°)
- if temp. < (every 3°) = -0.001
- if temp. > (every 3°) = +0.001



13. Glass cuvette

- take the absorbance/ optical density (OD) in colorimeter
- fix it on the mark

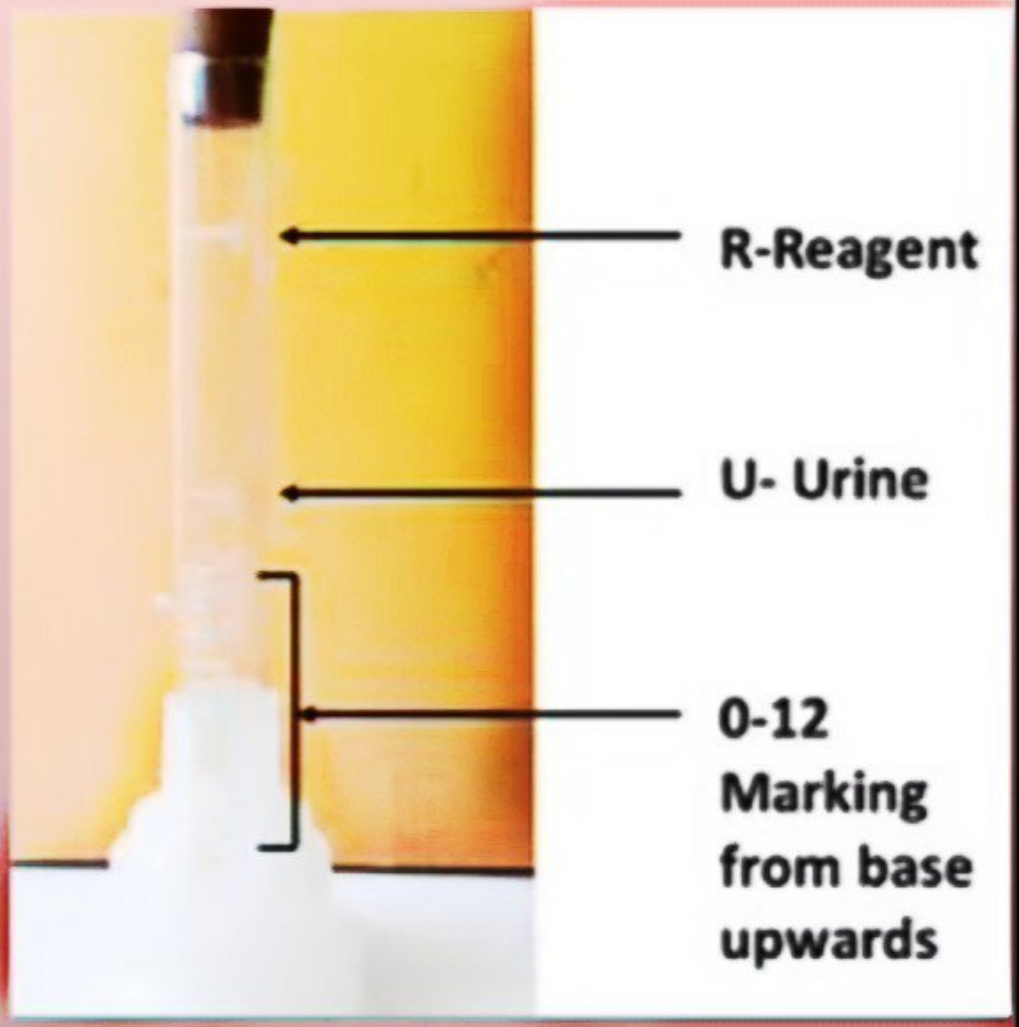
14. Plastic dropper

- to measure and transport small amount of reagent or sample
- eg- benedict's test

15. Glass bottle to store reagent

16. Albuminometer

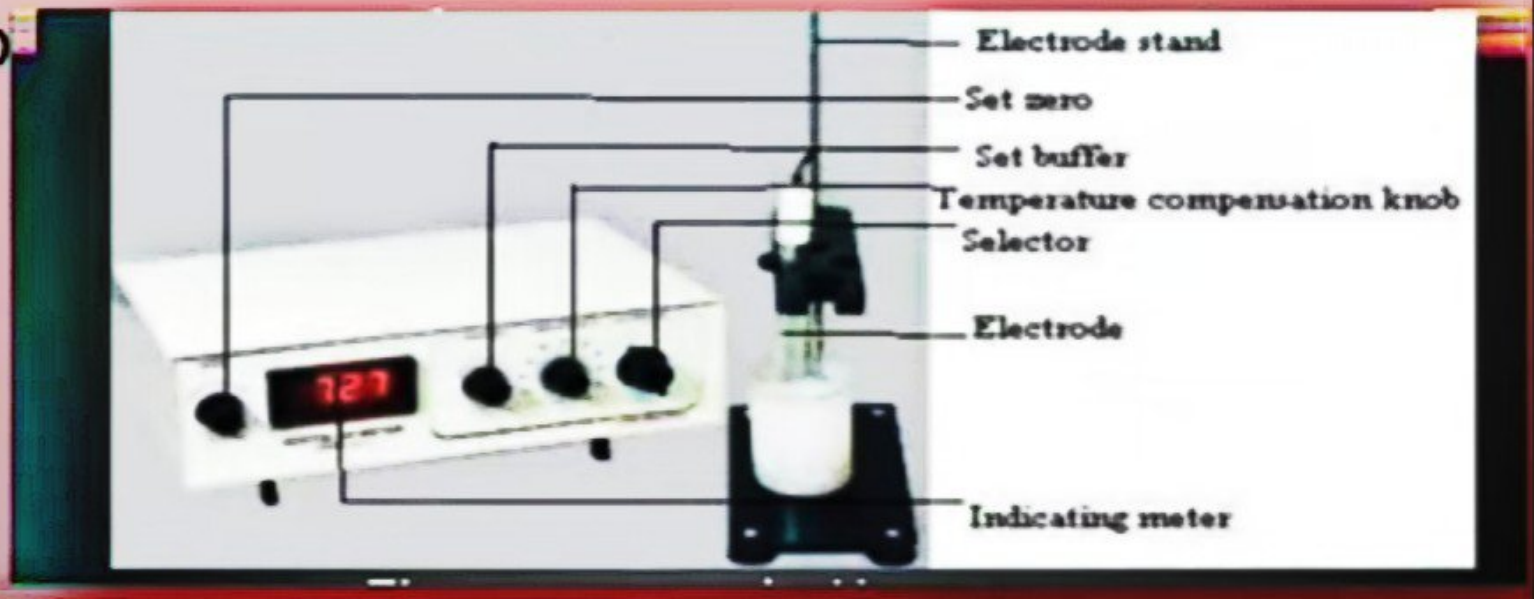
- use overnight and see sedimentation in morning
- borosilicated
- test tube with cork (red)



17. pH meter

- principle - measures pH onthe basis of concentration of H+ ions
- measure pH of fluids
- make solution of p pH
- has AgCl in

electrode



18. Colorimeter

- principle- based on Beer-Lambert's Law ; when a monochromatic light passes through an absorbing medium the absorbance is directly proportional to the concentration of the medium and the path length

19. Vortex shaker

- to mix small amount of liquids quickly in circular motion

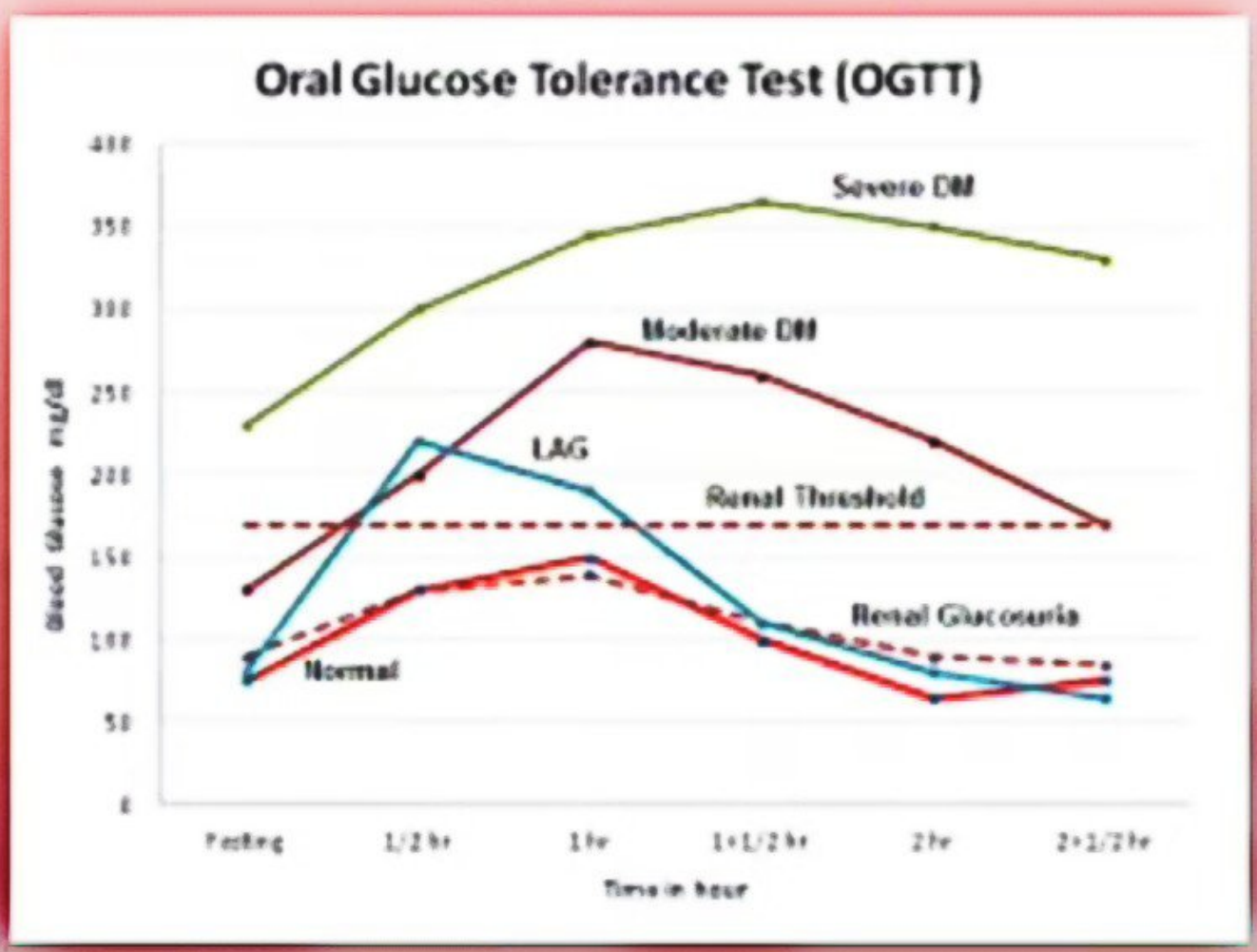
20. Semi auto analyser

- samples and reagents are mixed and read manually
- based on colorimetry principle

21. Water bath

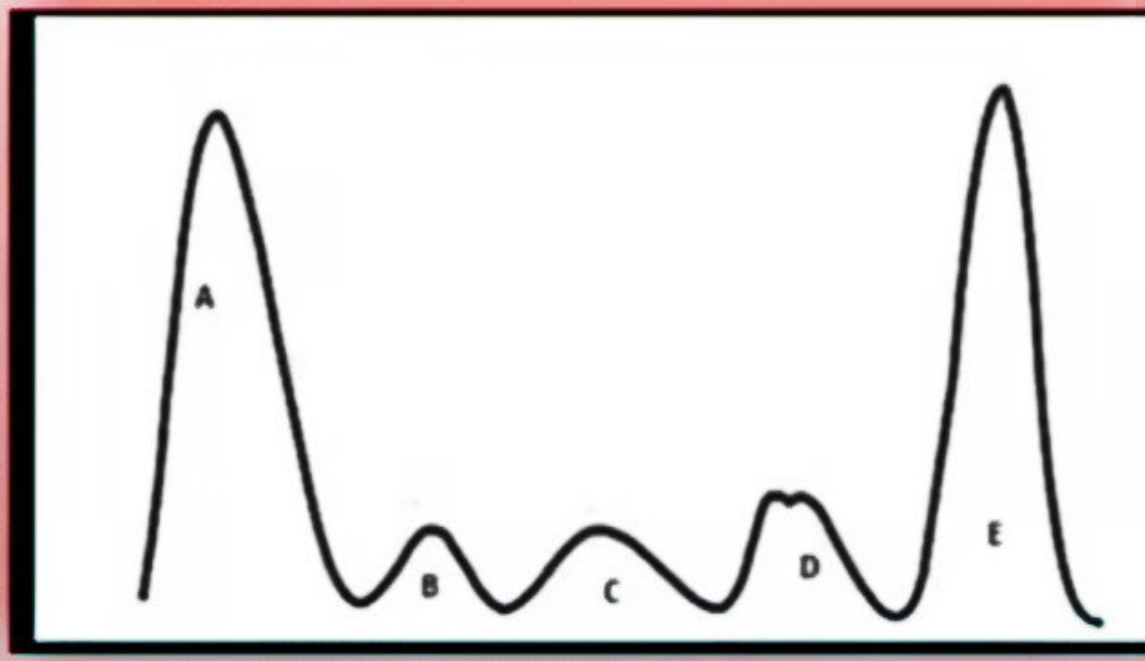
- the temp. of water is maintained at a constant level.
- boiling point of water - 100°C
- it is used to incubate samples over a period of time at a constant temp.

22. Glucose tolerance test curves

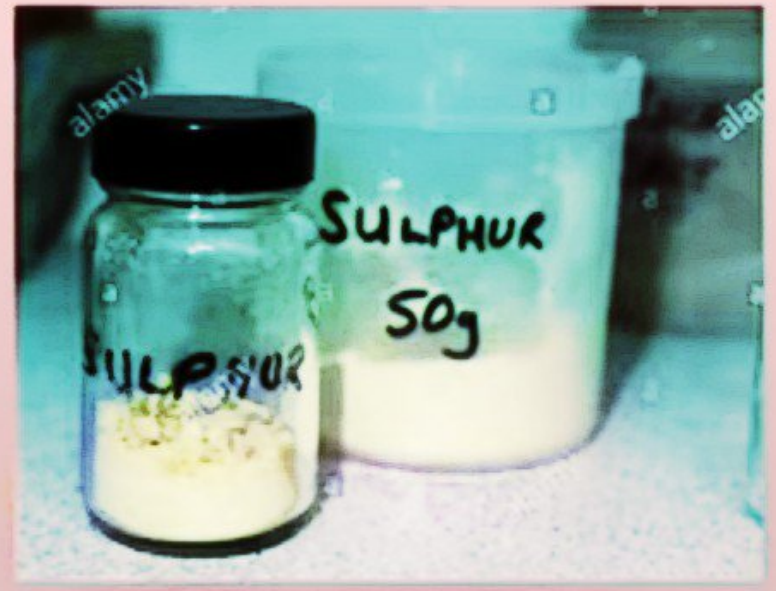


23. Plasma protein electrophoresis

- A - albumin
- B - alpha 1
- C - alpha 2
- D - Beta globulins
- E - Gamma globulins

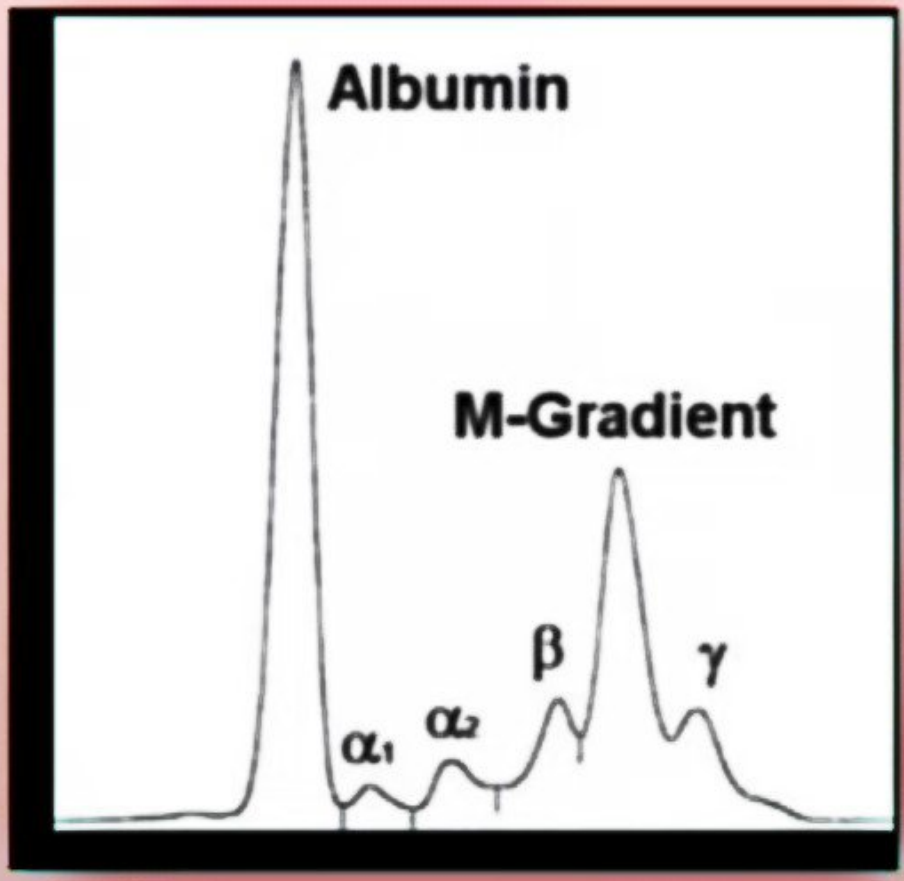


Benedicts reagent (dark blue)



Sulphur powder
(light yellow)

- diagnosis - multiple myeloma (cancer of plasma cells)
- tumor marker - bence jone's proteins
- abnormal band between beta globulins and gamma globulins



COMMON LABORATORY EQUIPMENTS

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