

1 Besides other laboratory fittings and apparatus, every candidate will require the following:

- (a) A scalpel;
- (b) A fresh Sukuma wiki, *Brassica oleracea* leaf, labelled **E**;
- (c) A cockroach, labelled specimen **F**, placed on a petri-dish;
- (d) A light microscope, one for at least five candidates, with low, medium and high power objective lenses;
- (e) Iodine solution, supplied in two test tubes, each containing about 2 ml, labelled as iodine solution;
- (f) Two(2)cover slips;
- (g) A white tile;
- (h) A hand lens;
- (i) Two (2) microscope slides;
- (i) Two (2) test tubes in a test tube rack;
- (k) An optical pin/needle;
- (l) Specimen **H**: Moulds grown on a piece of bread/cassava/sweet potato (for about 5 days). The piece may be 2x2x2 cm, with visible moulds, placed on a petri-dish;
- (m) A glass rod;
- (n) A 30 cm ruler;
- (o) 200 ml distilled water in a 250 ml beaker, labelled as distilled water;
- (p) Two(2) droppers;
- (q) Water in a wash bottle (may be shared);
- (r) Piece of tissue paper/serviette.

2 Preparation of Iodine solution

Iodine solution is prepared using the iodine crystals procured by the school and substance **G** supplied by the Kenya National Examinations Council. It is prepared as follows.

(a) For centres having between 1 and 20 candidates

- Place 0.6 g of the iodine crystals procured by the school and all of solid **G** supplied in a beaker.
- Add 120 ml of distilled water and stir until it dissolves.
- Supply each candidate with two test tubes each containing about 2 ml of the solution labelled as **iodine solution**.

(b) For centres having more than 20 candidates

- Assume the number of candidates is **N**.
- Put 0.03N grammes of iodine crystals procured and all of substance **G** supplied in a beaker.
- Add 6N ml of distilled water and stir until it dissolves.
- Supply each candidate with two test tubes each containing 2 ml of the solution labelled as **iodine solution**.