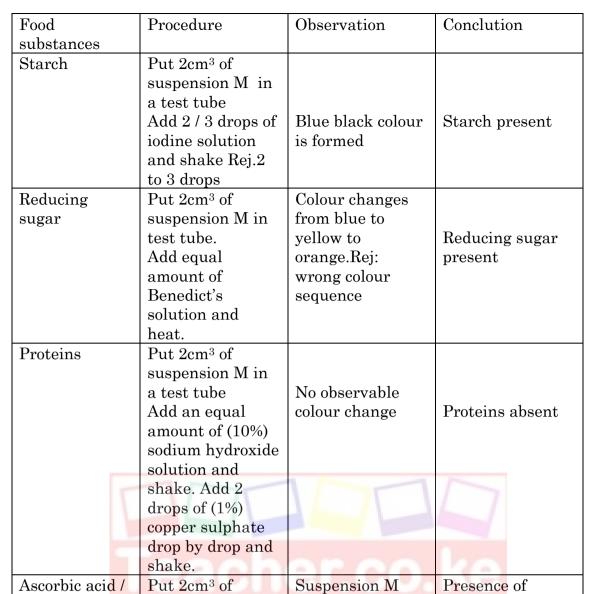


## BIOLOGY MARKING SCHEME

## 231/3









NB – for wrong procedure reject observation and conclusion

decolourises

**DCPIP** 

Ascorbic acid

2. a)- Absence of root hairs on piliferous layer / epidermis;

DCPIP in a test

Add solution M drop by drop into the DCPIP in the test tube and

tube

shake

- Tissues not fully differentiated e.g. vascular tissues;
- Presence of pith
- b) A-piliferous layer
  - B- pith

Vitamin C

- C- Cortex
- c) A-protection of inner tissues from mechanical injury / infection, water loss/dessication;
  - C –storage / package / support;
- d) D phloem- translocation / transport of manufacture food;



- e) (i) Protect the apical meristem;
  - (ii) Secondary thickening / growth;
  - (iii) Increase surface area for absorption of water and mineral salts;
- 3. a) Thigmotropism / Haptotropism;
  - b) Auxins are more concentrated on the side that is not in contact with the branch of support; there is more cell elongation on the outer part in contact with the support plant; hencer the growth curvature is towards the branch;
  - d) Shoot \ root tip \ apical meristems;
    - -lateral meristems \ cambium;
  - e) –stimulation of fruit growth when flowers have not been pollinated \ parthenocarpy;
    - induce growth of adventitious roots in stem cutting for vegetative propagation;
    - Manufacture of selective weed killer;
    - In pruning of crops e.g. tea, coffee, which result in sprouting of side branches;



