

END OF TERM II EXAMINATION MARKING SCHEME

1. A)

Solution	Food substance	Procedure	Observation	Conclusion
Solution X	Reducing sugars (1/2)	Add equal amount of Benedict's solution to a test tube containing solution X and heat to boil.(1/2)	The blue colour of iodine solution is retained;	Reducing sugars absent;
Solution Y	Reducing sugars (1/2)	Add equal amount of Benedict's solution to a test tube containing solution Y and heat to boil.(1/2)	Colour turns to orange;	Reducing sugars present;

b.)

Solution	Food substance	procedure	observation	conclusion
Solution Y	Reducing sugars	Add equal amount of Benedict's solution to a test tube containing solution X and heat to boil.	The blue colour of iodine solution is retained;	Reducing sugars present;
Solution X	Reducing sugars (Add equal amount of Benedict's solution to a test tube containing solution Y and heat to boil	Colour turns to orange	Reducing sugars present;

c.) diffusion;

- d.) The reducing sugars in solution Y; diffused; from the beaker where it was highly concentrated into the visking tubing where it was less concentrated;
- e.)-Absorption of mineral salts from the soil;
- Absorption of digested foods and glucose from the ileum into the blood stream;
 - Gaseous exchange;
 - removal of nitrogenous wastes in some fresh unicellular organisms;
 - Transport of manufactured food from leaves to other parts of the plants;

2. (a)
 Set ₁ – normal conditions
 Set E₁ – in the dark
 Set B – unidirectional light 3mks
- (b) (i) Etiolation; 1mk
 (ii) To reach light for photosynthesis; 1mk
- (c) (i) Positive phototropism; 1mk
 (ii) Auxins migrate to the darker side causing faster growth/elongation on this side; resulting in curvature of the shoot towards the source of light; 2mks
- (d) (i) Set A₁ – Epigeal; 1mk
 Set M₁ – hypogeal; 1mk
 (ii) Set A₁ – cotyledons brought above the ground; 1mk
 Set M₁ – cotyledons remain below the earth's surface/ underground; 1mk

- 3 .(i) Arthropoda;
 (ii) X- Arachnida;
 Y- Insecta;
 Z- Crustacea;
- (iii) - Useful in plant pollination;
 -Produce edible food eg. Honey and royal jelly;
- (iv) –Transmits disease causing organisms/disease vector;
 -Sucks blood hence can cause anemia; (any three)
 -Bites on animals destroy the quality of hides and skins;
 -Wounds created become avenues for secondary bacterial infection;
- (v) a) Flight;.....presence of wings;
 b) Walking;.....presence of legs;