ASUMBI GIRLS HIGH SCHOOL

 POST -MOCK 1

AUGUST/SEPTEMBER

2022

 **BIOLOGY PP3 MS**

1a)

|  |  |
| --- | --- |
|  **Specimen P** |  **Specimen Q** |
| -Has two scars |  -Has one scar  |
| -Has one cotyledon | -Has two cotyledons  |
| -Has Food stored in endosperm | -Stores food in cotyledons. |

b) P- Ovary;

 Q- Ovule;

ci)

 **

 D-1mk

 L- 1X3= 3mks N/B Mark first 3 labels clockwise.

ii) -Endosperm- Storage of food;

 -Embryo (plumule and radicle)- Develops into shoot and roots;

 -Testa – Protects inner delicate parts/embryo;

 - Coleoptile – Protects plumule from mechanical damage during germination;

d)

|  |  |  |  |
| --- | --- | --- | --- |
| Test | Procedure | Observation | Conclusion |
| Starch | To 2ml solution Q,Add 3drps of Iodine solution; | Blue black colour ; | Starch present; |
| Protein | To 2ml solution Q,Add equal amount of sodium hydroxide.Add Copper(II) sulphate drop by drop; | Colour changes to purple/violet/mauve; | Proteins present; |

2 ai) Touch;

 ii) Positive phototropism;

 iii)Place the potted plant on a revolving klinostat in a similar set up.

b) When the tendril comes into contact with the upright firm support; auxins migrate to the

 opposite side/side away from touch;

 This causes faster cell growth/ cell elongation on the side away from the contact/OR causes

 Slower growth on the side in contact with the firm support; and the tendril coils round the support;

ci) **K1**- It offers support to the non-woody stem/plant;

 **K2**- The plant shoot grows towards the source of light in order to photosynthesize;

3a) S- Larva;

 bi) Preceding stage -Larva;

 Succeeding stage- Pupa;

 ii) Complete metamorphosis;

c) – Tracheal system;

 - Presence of spiracles;

di)- Vegetation/ plant material;

 - Has biting mouth parts;

 ii) It undergoes re-organization of body tissues to form the adult form (ie metamorphosis);

 iii) – Has wings for flight;

* Has jointed legs for walking/crawling;

ei)- Stimulates shedding of the larval cuticle while retaining the youthful characteristics/ prevents metamorphosis;

 ii) Stimulates shedding of the adult cuticle/moulting in adult;