

**ASUMBI GIRLS HIGH SCHOOL**  
**POST -MOCK 1**  
**AUGUST/SEPTEMBER**  
**2022**

**BIOLOGY PP3 MS**

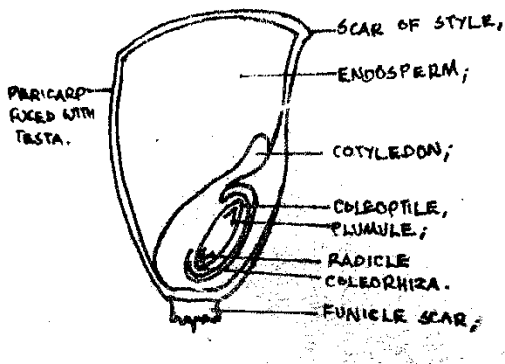
1a)

| 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,<br>Add 3drps of Iodine solution;  | Blue black colour ;                    | Starch present;   |
| Protein | To 2ml solution Q,<br>Add equal amount of sodium hydroxide.<br>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;