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BIOLOGY PAPER 3
TERM 3 2017

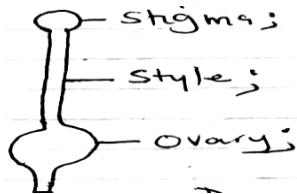
MARKING SCHEME

1.

FOOD SUBSTANCE	PROCEDURE	OBSERVATION	CONCLUSION
Proteins	<ul style="list-style-type: none"> Put 2cm³ of food sample D into a test tube. Add sodium hydroxide solution Add copper sulphate solution and shake; 	No colour change / blue colour of copper sulphate persists / retains / maintains;	Proteins / absent / Absence of proteins;
Non-reducing Sugar	<ul style="list-style-type: none"> Put 2cm³ of food sample D into a test tube. Add dil. Hydrochloric acid, boil and cool; Add sodium hydrogen carbonate until the fizzing stops; Add Benedict's solution and boil; 	Colour changes from Blue to green / yellow orange and brown. Acc Redbrown / if only one colour is mentioned.	Non-reducing sugar(s) present; Rej. Reducing sugar(s); present after hydrolysis.
Starch	<ul style="list-style-type: none"> Put 2cm³ of food sample D into a test tube. Add iodine solution and shake 	Coour changes to blue black / blue-black / blue / black;	Starch present

2. (i) (a) Dichotyledonae;
(ii) - Network venation / net veined leaves;
- Presence of leaf petiole / leaf stalk;
- Broad leaf;
(iii) Insect;
(iv) - Brightly coloured petals to attract insects;
- Large and conspicuous;
- Scented;
- Has landing platform for insects;
- Anthers are firmly attached to the filament;

(v)



3. (a)

K	M
<ul style="list-style-type: none"> - Has 3 pairs of legs - Has 3 body parts - Has wings - Has antennae 	<ul style="list-style-type: none"> - Has 4 pairs of legs; - Has 2 body parts; - Lack wings; - Lack antennae;

- (b) (i) Phylum - Arthropoda;
Reasons: - Jointed appendages;
- Segmented body ; -Presence of exoskeleton;
- Bilaterally symmetrical;
(ii) Class - Arachnida
Reasons: - has 4 pairs of legs;
- body divided into two parts;
- lack antennae;
(c) exoskeleton;
(d) (i) Pisces;

- (e) (ii) - Presence of fins;
- Presence of scales;
- Presence of lateral line;