

**BIOLOGY 231/3 PRACTICAL marking scheme**

1.

FOOD SUBSTANCE	PROCEDURE	OBSERVATION	CONCLUSION
<b>STARCH;</b>	To 3ml of solution <b>S</b> in a test tube added 3 drops of iodine solution;	Colour changes to blue-black	Starch present;
<b>REDUCING SUGARS;</b>	To 3ml of solution <b>S</b> in a test tube, added 3 ml of Benedicts solution; heated;	Colour changes from blue to green to yellow to orange; / colour changes to orange	Reducing sugars present;
<b>PROTEIN;</b>	To 3ml of solution <b>S</b> in a test Tube Added 2ml of Sodium Hydroxide Followed By 2ml of Copper sulphate;	Colour changes to purple;	Protein present;

2. a)
- |                        |                       |
|------------------------|-----------------------|
| 1. Neural spine;       | 5. Ilium ;            |
| 2. Zygapophysis;       | 6. Acetabulum ;       |
| 3. Transverse process; | 7. Olecranon process; |
| 4. Centrum;            | 8. Sigmoid notch;     |

**b) Functions of the parts labeled**

1. Muscle attachment;
6. Articulation (of the bone) with the head of femur;
7. Offers area for attachment of tendons; prevents overstretching of the forearm at the joint;  
Joint between bone **L** and **M** – immovable joint; / fixed joint

b)

Plant	Identity	Steps
A	Geranium	1b, 4b, 6a
B	Pistia	1b, 4a, 5a
C	Money plant	1a, 2a
D	Hibiscus	1b, 4b, 6b
E	Grass	1a, 2b, 3b
F	Zibrina	1a, 2b, 3a
G	jacaranda	1a, 4a, 5b

- c) **E** – Monocotyledonae;  
**C** – Dicotyledonae; (2mks)