

BIOLOGY PAPER 3
MARKING SCHEME

Diet

1. (a) P – Fresh

O – Presence of canines which are long and curved.

- Strong jaw muscles

M – Vegetation

- Diastema

- Chisel – shaped incisor teeth

b) C – Carnassial tooth

J – Incisor tooth

c) Moves the jaws up and down by snapping; hence killing the prey

d(i) Diastema

ii) Aid the tongue in turning of grass and also moving the food during grinding;

e) They are well camouflaged (i.e. their body colour matches that of surrounding) hence predator not easily noticed by prey until it is too late; or prey not seen by the predator easily hence survives the attack hence avoid predation.

2.a) G – Thigmotropism / haptotropism

I – Nastic

S – Haptonasty

b) S – Provide nitrogen ion / elements when digested

T – Help in pollination

c) A – Stamen

B – Carpel

C – Ovary / ovule

D – Receptacle

d) Hypogynous ovary / superior ovary

e) The tendril comes into contact with a stem / hard object; the contact causes lateral migration of Auxins hence lowering its concentration; than the outer part, higher Auxin concentration promotes faster growth in the shoot outer part; continuous growth makes tendril to coil round the object;



3.a)

Food being tested	Procedure	Observation	Conclusion
Starch;	To solution X in a test tube add iodine solution	Colour change to blue-black	Starch present in solution
Reducing sugar	To solution X in a test tube add benedicts Solution and heat / warm / heat the mixture as you observe	Colour change from blue, green, yellow, orange, red precipitate;	Presence of reducing sugars in solution X
Ascorbic acid / vitamin C	To DCPIP in a test tube add solution X drop wise as you observe;	Blue colour of DCPIP remains unchanged;	Absence of vitamin C / ascorbic acid in solution X

(9marks)

b(i) Oxidized to produce energy;

Converted into glycogen for storage when in excess

(2marks)

ii) Photosynthesis

(1mark)

c) Insulin

(1mark)

