

## BIOLOGY MARKING SCHEME

1 A. (I) A.....Incisor

Rej wrong spellings

Reason.....chisel shaped/wide edge/wedge shaped.

(ii) B...Molar

Reasons..Presence of cusps/ridges

Presence of more than one root

Crown

Cusps/ridges



Root

Neck

1B

( Labeling must be done on either of the two molar teeth)

1C. A.....Cutting food

B.....Grinding and chewing food.

1D. X.....Flesh/ meat

Reasons.....Presence of long/curved/sharp/pointed canines for grasping prey.

Presence of carnassial teeth (for cutting/crushing) bones.....spelling of carnassial must be correct.

y .....vegetation /grass/shrubs/herbs/plants/leaves.

Reasons.....Presence of diastema

Absence of teeth/canines and incisors at the front part of the upper jaw.

Presence of cusps/ridges for grinding food      max 2 mrks



Pad/horny pad

1E.

(labeling must be done on the photo)

1F. ....y

2 a) Translocation

b) phloem tissue

c) Active transport/mass flow through diffusion

d) Have sieve plates that support the phloem tissue

Have sieve pores that act as a pathway to allow movement of materials

Sieve tubes are cylindrical and joined end to end interconnected by cytoplasmic filaments

Sieve elements lack other cell components like nucleus

Has companion cells that have numerous mitochondria to supply energy needed for active transport

Presence of plasmodesmata between sieve elements and companion cells to facilitate movement of materials between them.

3.A)

TEST	PROCEDURE	OBSERVATION	CONCLUSION
STARCH(filtrate)	To food add iodine solution;	no colour change; rej no change/colour of iodine remains/persists	starch absent;
STARCH(residue)	To food add iodine;	Blue/black/blue-black; rej blue/black,black-blue	starch present;
Reducing sugars;	To food add benedicts solution and heat;	Green-yellow-orange-brown rej greenish, brownish etc	Reducing sugars present;

Tests for starch ,award only for procedure ,observations and conclusion. For reducing sugars, award in all areas total 10 mrks

3B) Positive results on the residue and negative results on the filtrate; 1mrk

Starch has big/large molecules that cannot pass through the pores in the filter paper ;1 mrk

3C) Kidney nephron s; 1mrk

