

Kenya Certificate of Secondary Education

BIOLOGY PAPER 3

MARKING SCHEME

1. (a) (i) T1 – Molar teeth

Reason – presence of cusps/ridges

T2 – Incisors

Reason – chisel shaped/wide/sharp edges/wedge shape

(ii) Vegetation/grass/shrubs/herbs/plant leaves rej. Pasture, herbivores, vegetables but mark reason

Reason

- Presence of diastema;

- Absence of teeth (incisor and canine) at the front part of the upper jaw;

- Presence of horny pad;

- Presence of premolars/cusps for grinding vegetation

(iii) 20

- (b) (i) C – Tibia

E – Fibula

(ii) Femur

Joint – Hinge joint

2. (a) (i) Tuber

(ii) Presence of axillary buds/scale leaves

(b) (i)

Tube	Observations
A	Bubbles formed/effervescence
B	Very few/No bubbles/no effervescence
C	A lot of bubbles produced

(ii) Tube B: The enzyme was denatured by boiling; hence could not break down hydrogen peroxide into water and oxygen

Tube C: The cutting increased the surface area; Thus exposing more enzyme catalase to break down hydrogen peroxide into water and oxygen

(c) (i) Hydrogen peroxide + catalase enzyme \longrightarrow water + oxygen + catalase enzyme

Or

Hydrogen peroxide $\xrightarrow{\text{Catalase}}$ water + oxygen

Enzyme

Rej. If symbols are used

(ii) Detoxification;

(iii) Liver;

3. (a) (i) J – Monocotyledonae;

K – Dicotyledonae;

(ii) J – Fibrous roots present; leaves with parallel veins;

K – Tap roots present; two cotyledons present; leaves with network venation;

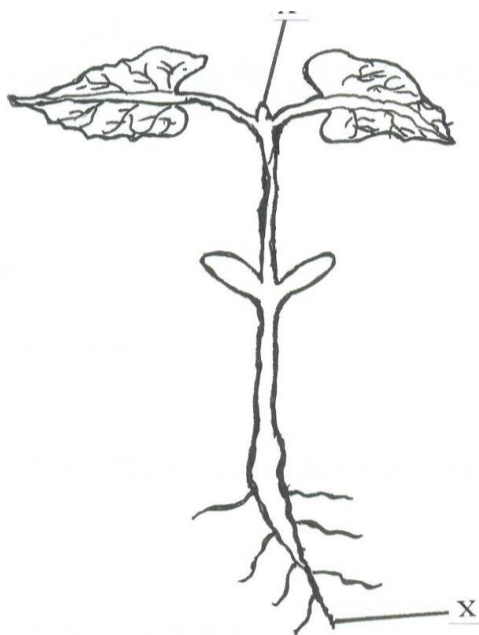
(b) J – Hypogeal;

K – Epigeal;

(c) R – Cotyledon remains;

Q – Root hairs;

(d) esene



(e)

