MWAKICAN TERM 1 FORM 3 BIOLOGY P3 2016

Marking scheme

1. a) J – No reaction/fizzing

 K- Fast Reaction / fizzing

 L – No reaction / fizzing

 M – Slow reaction /Fizzing

b) i) Reaction is fast in k while in M,

 ii) Reaction is fast in k while no reaction in J.

c) i)the reaction k was faster than in M because grinding increased the surface area for enzyme action.

ii) There was reaction in test tube K but no reaction in J because boiling denatured the enzyme in J.

 d) Hydrogen peroxide water + oxygen

2. (a) 1. (a) 8 or more legs present ……………………….. go to 2

(b) Fewer than 8 legs present …………………… go to 4

2. (a) Legs shorter than the body…………………… go to 3

 (b) Legs longer than the body …………………… Lycosa (B)

3. (a) All body segments have one pair of legs……. Geophilus (A)

 (b) Some body segments without legs ………….. Scutigenella (C)

4. (a) Pincers on tip of abdomen …………………… Porficala (E)

 (b) No pincers on tip of abdomen ………………. Enchytraeid (D)

 b. Arachnida, Insecta,

 c. Any four correctly labeled parts. (2 mks)

3. a) (i) Leaf;

 ii) P: - Stoma; Q: - Palisade cell; U: - Cuticle; R: - Sieve tube; T: - Air space;

 iii) Xylem; Phloem;

 iv) Function: - Specialized for light absorption;

 Adaptation: - Long columnar/cells packed vertically to trap more light; Rich in chloroplast to increase their

 sensitivity to light for photosynthesis;

 v) Light/light intensity / ph changes / Humidity / atmospheric pressure / Wind;

b) Object length = Image length (µm) ;

 Magnification

 1.3 X 1000 ;

 5000

 0.26µm