

BIOLOGY PAPER THREE

MARKING SCHEME

1 (a) (i)

SPECIMEN R	SPECIMEN S
No spikes on legs Hind legs not muscular	Spikes on legs Hind legs muscular

(ii) - Spikes for protection from predators (1mk)

- Strong muscular limbs for strong leaping when taking off during flight (1mk)

(b) (i) Phylum: Arthropoda (1mk)

Class : insect (1mk)

(ii) - Has segmented bodies (1mk)

- Jointed appendages (1mk)

(c) (I)

Complete	Incomplete
1 eggs hatched to larva,pupa and then adult Larva and pupa no similar to adult	Egg hatches to nymph Nymph similar to adult

(ii) K – housefly – 1mk

(iii) S – locust (1mk)

2. (a)

Test –tube	Treatment	Observation at start of experiment	Observation at the end
1	Starch	Blue – black	Blue – black
2.	Starch + NaCl + I	Blue – black	Traces of yellow brown
3	Starch + 1.4% NaCl + L	Blue-black	Colour of iodine

(c) Test tube 2

Yellow (1mk)

Test tube 3 orange (1mk)

(d) Control experiment

(e) No enzyme activates/cofactor added L in test tube/ hence starch not broken down.

Little enzyme activator/cofactor added 0.1 % and L in test tube 2 hence little starch is broken hydrolysed.

More enzymes activator/confactor and L added in test tube 3 hence all starch hydrolysed (4mks)

(f) L – enzyme /amylase/diastase

(g) to provide optimum temperature.

3 (a) A – Capsule

B – Rhizoids

C – Rhizome

(b) D – Bryophyta

Q – Pteridophyta

(c) Gaetophyte of Q

Prothalus.