

MasterNAEC.

THE PARK OF PERSONS ASSESSED.

61

[3 m

[3 m

Question 1

- (a) (i) Explain the term homeostosis.
 - (ii) Name three organs in humans that are involved in homeostasis.

(b) Complete the table below by naming three types of neurones and stating one function of each of the neurones.

Types of neurone	One function of neurone
	/(0
	IVEO.

(c) Make a drawing, 8 co 10 cm long of a typical neurone and label fully.

Fee

Question 2:

(a) State two differences between primary and secondary succession.

Secondary succession

(b) Place the following sites of succession under their appropriate headings.

Rocky surface, Newly formed sand dunes. Volcanic eruption sites.

[23

Question 4:

A homozygous dominant red flowered plant (R) was crossed with a homozygous recessive white flowered plant (r). All the offspring of the F, generation were pink.

With the aid of a genetic diagram, show the genetic cross.

[8 marks]

What type of inheritance is illustrated in the cross? (6)

[1 mark]

Explain briefly the mechanism involved in the type of inheritance named in 4(b). TET

[3 marks]

- A test cross was carried out with one of the F1 offspring. Give the: (d)
 - genotype of the parent;

2 marks

plienotypes of the result of the cross; (iii)

[2 marks]

genotypes of the result of the cross; (m)

[2 marks]

genotypic ratio of the offspring obtained (iv)

[2 marks]

Question

120

the following reproductive methods: **Fatt**

aviparity: (0)

[6 marks]

weighter ity. Name three Classes of animals that are oviparous. [3 marks]

Complete the table below. 60)

Courtship behaviours	One example of animal
Release of chemical substances	
	Firefly
Dancing	
	Toad

[4 marks]

State one role each of the following bacteria in the nitrogen cycle.

	n.l.
Bacteria	Role
Rhizobium	
Azotobacter	
Nitrosomonas	
Nitrobacter	
Pseudomonas	

[5 mark

(e) Complete the table below.

Organism	Feeding habit
Mosquito larva	
Butterfly	
Adult movemo	-
N. L. P. S.	
Maize weevil	

[5 marks

(f) In an epigeal germination experiment, the following parts were observed on the seedlin Cotyledon, Epicotyl, Hypocotyl, Radicle. Place the parts under the appropriate heading on the table.

Below the soil	Above the soil

[4 marks]

- (g) Name the sense organ that is:
 - (i) used for smelling:
 - (ii) sensitive to touch:

10

Elephant