CROSS COUNTRY EXAM 2014

BIOLOGY
PAPER III
TIME: 1 ¾ HOURS
MAY/JUNE 2014

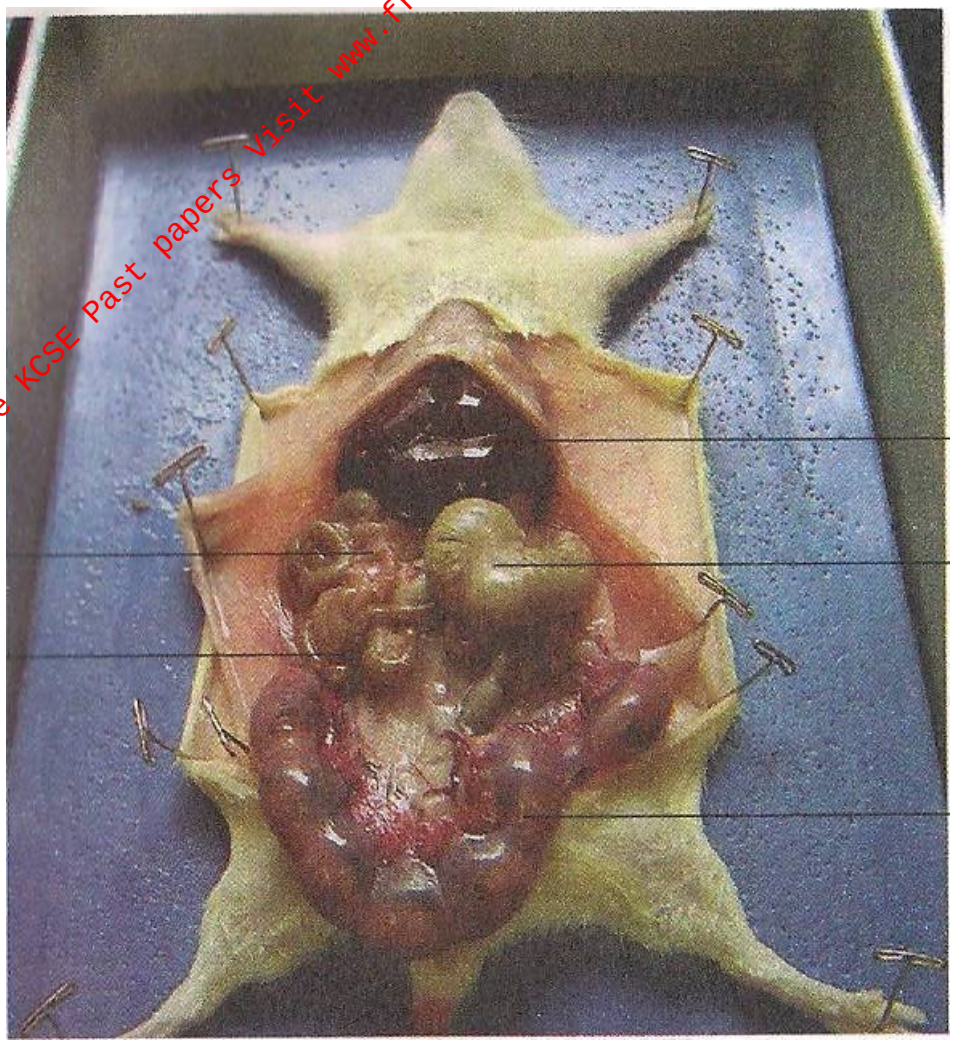
NAME:……ADM.NO:……..….CLASS:……..

INSTRUCTIONS

FOR EXAMINER'S USE ONLY

80 MARKS

1. Study the diagram below and answer the questions that follow



a) Name the structures labeled P, Q, R and S (4mks)

b) State the function of structures P, S, R and T (5mks)

c) State the sex of the mammal (1mk)

d) Give reason for your answer in (c) above (2mks)

e) Give two homeostatic functions of Q (2mks)

2. You are provided with a substance labeled H.
Filter the substance and collect the filtrate. Filtration is expected to be complete after about 30 minutes

a) Using the reagents provided test for the food substances in the residue and the filtrate. Record your procedures, observations and conclusions in the table below

Residue (4mks)

Food substance	**Procedure**	**Observation**	**Conclusion**
Protein			
Reducing sugars			

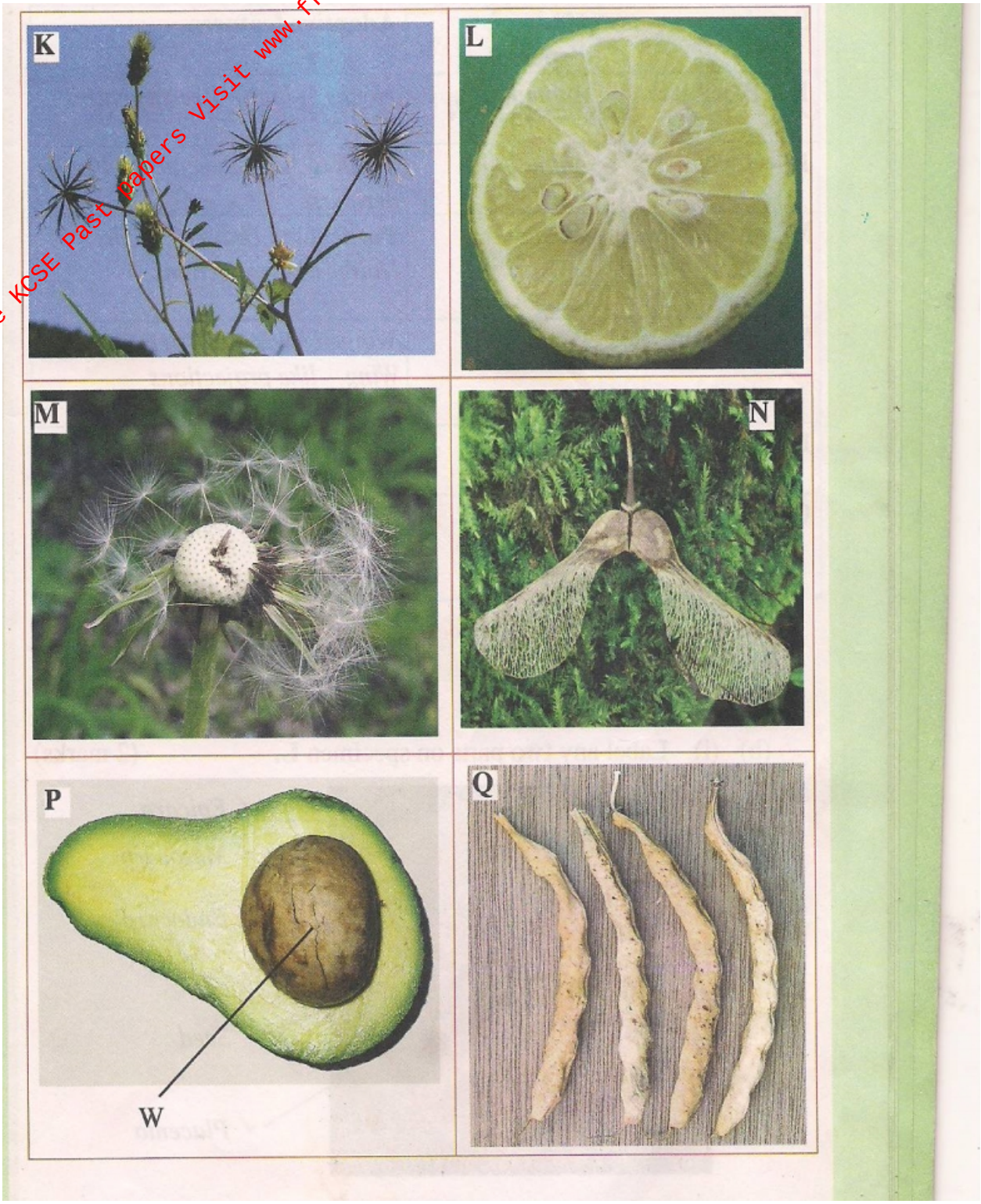
Filtrate (4mks)

Food substance	Procedure	Observation	Conclusion
Protein			
Reducing sugar			

b) i) A food substance was found to be present in the residue, but absent in the filtrate. Give a reason for the absence of this food substance in the filtrate
(1mk)

ii) If the food substance mentioned above was lacking in the diet of a young child state the deficiency disease the child is likely to suffer
(1mk)

3. Study the diagrams of fruits below



a) Name the type of fruit shown by P and Q (2mks)

b) State the type of dispersion used by fruit M, K and N. Give adaptation for each of them (6mks)

c) Draw a well labeled diagram of diagram L (5mks)

d) State the type of placentation shown by diagram Q (1mk)