

**THE PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY
DEPARTMENT OF AGRICULTURE**

**ENTRY TEST FOR NON-SCHOOL LEAVERS: 2014
BIOLOGY**

TIME ALLOWED:- 3 HOURS

INSTRUCTIONS TO CANDIDATES:

1. This is a closed book examination; notes, textbooks and recording devices such as mobile phones are not allowed in the room.
2. Answer all questions.
3. All answers must be written in the space provided. No other materials will be accepted for marking
4. You have 10 minutes to read through the paper. You must not begin writing during this time
5. Marks for each question are shown. Total marks = 100
6. Print your name and number clearly in the space below. Do it now

Complete the following now

Student Name	
Student number	
Examination Date	
Signature of Student	

1. Define the following terms (3 mark each, total =15)

A) Allele (of a gene)

b) Locus (of a gene)

c) Stimulus

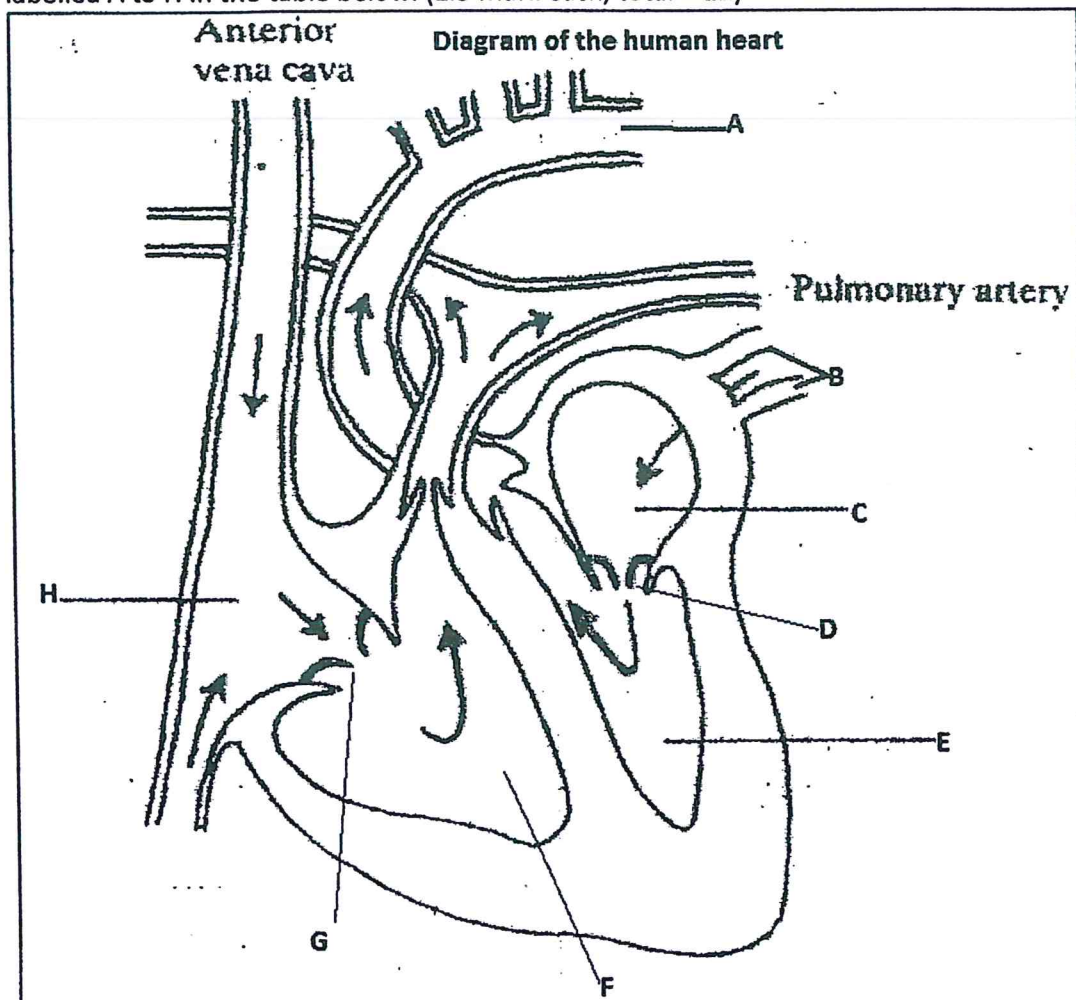
d) Accommodation (in the eyes)

e) A food web

Questions 2 to 15 write either TRUE or FALSE in the space provided to answer the questions(1.5 mark each, total =21)

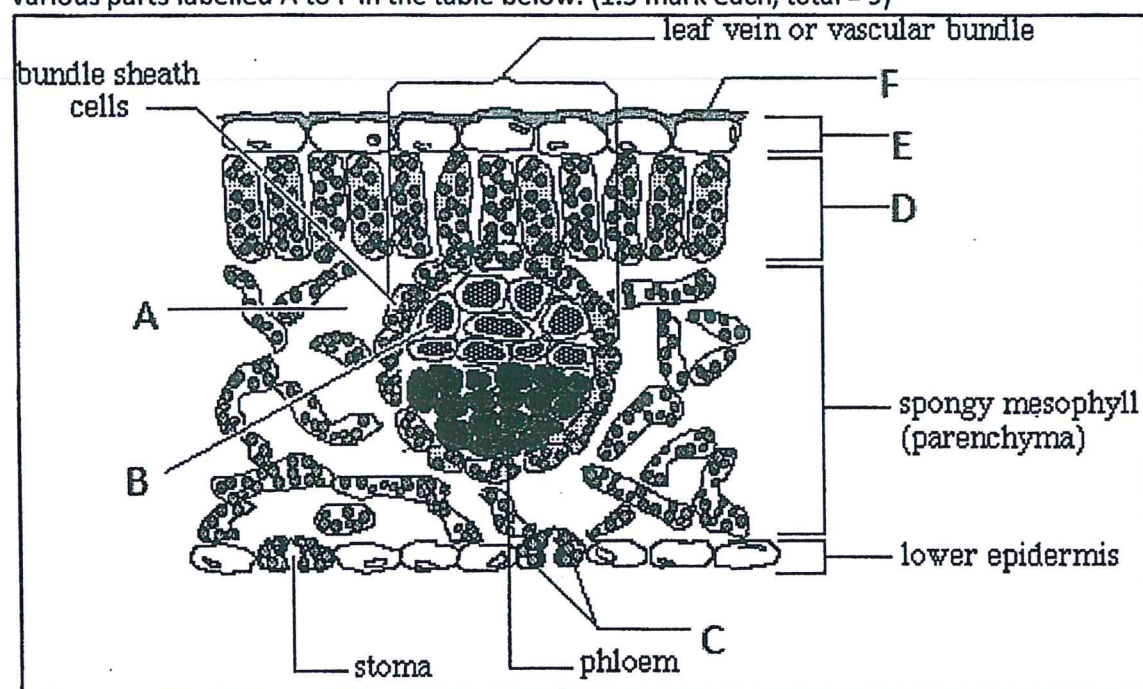
No.	Question	True/False
2.	Endocrine organs secrete hormones directly into the blood stream	
3.	Some neurons do not have dendrons	
4.	Axons conduct messages towards the cell body or nucleus	
5.	Lipase is an enzyme that can digest carbohydrates	
6.	Rickets is a disease caused by deficiency of vitamin C	
7.	Enzyme Renin is found in the saliva of humans	
8.	The pH of the contents of the stomach is alkaline	
9.	Bile is a digestive juice produced by the gall bladder	
10.	Villi are small projections from the walls of the stomach	
11.	Rib bones of man form part of the appendicular skeleton	
12.	White blood cells and platelets are produced in bone marrow	
13.	Tendons join bones to bones	
14.	Contraction of heart muscles are initiated by the muscle itself	
15.	In man the humerus is a bone found in the legs	

16. A diagram of a typical human heart is shown below. Write down the name of the various parts labelled A to H in the table below: (1.5 mark each, total = 12)



Label	Name
A	
B	
C	
D	
E	
F	
G	
H	

17. A diagram of the cross section of a typical leaf is shown below. Write down the name of the various parts labelled A to F in the table below: (1.5 mark each, total = 9)



Label	Name
A	
B	
C	
D	
E	
F	

18. Write down the names of the three types of neurones found in humans (2 mark each, total = 6)

19. What is the cause of nearsightedness (myopia)? (6marks)

20. Compare asexual reproduction and sexual reproduction (6 marks)

21. Compare Complete and incomplete flower (6marks)

22. Compare the alternate and opposite arrangement of leaves in plants (6marks)

23. How is the level of glucose in the human blood regulated? (13marks)