## GREENLAWNS HIGH SCHOOL BIOLOGY EXAMINATION

- 60 MARKS STD 9 **Ouestion 1** A) Name the following (10)i) Energy currency of the cell ii) An anticoagulant iii) Mineral present in bones iv) Number of chromosomes in humans v) Largest hole in the skeletal system vi) A unisexual flower with only stamens vii) Protective sheath around the plumule in the maize grain viii) A flower having bracts ix) A polysaccharide found in the liver of humans x) full form of DNA QUESTION 2 A) The following questions are related to the skeletal system(5) i) List 2 functions of the same ii) Name the parts of the vertebral column. Give their numbers also. iii) Name the 3 types of muscle iv) Give an example of an immovable joint v) Arrange in the correct sequence ulna, phalanges, humerus, carpal, metacarpal B) Choose the odd one out Give a reason for your answer (3) i) saliva, sweat, blood, tears, HCl ii) nostrils, trachea, larynx. alveolus, bronchi iii) nucleus, mitochondria, cell wall, plastids, cell membrane
- C) Draw an animal cell under the electron microscope and label any 4 parts (2)

2

- A) Drawn below is a diagram showing a part of the digestive system.(5)
- a) Identify parts 1, 2, 3 and 4.
- b) Why is the small intestine narrow and long?
- c) Name and give the location of the 3 salivary glands
- B) Give one difference between the following pairs

(5)

- i) Photosynthesis and Respiration (end products)
- ii) Ligament and Tendon (Function)
- iv) Hypoxia and Asphyxiation(definition)
- v) cell wall and cell membrane

## **QUESTION 4**

A) With respect to the inhalation phase of respiratory cycle ,answer the questions that follow

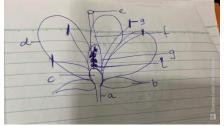
- i) List 4 changes seen in the phase
- ii) Give 2 differences between inhaled and exhaled air
- iii) Give 2 differences between anaerobic respiration in plants and animals
- B) Give the importance of the following (5)
- i) villus
- ii) bile
- iii) epiglottis
- iv) chlorophyll
- v) Joint

## QUESTION 5

A) Give equations to show enzymatic reactions in the intestine of the following

- i) starch
- ii) peptides
- iii) emulsified fats
- iv) lactose

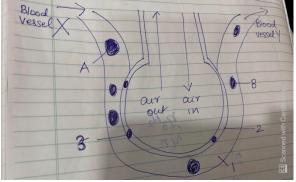
B) Drawn below is a diagrammatic representation of a flower (6)



- i) Label parts a ,b ,c and d.
- ii) What are parts e ,f and g known as collectively known as?
- iii) What is the importance of parts h and i?
- iv) Define allogamy.
- v) Why is fertilization in flowers known as double fertilization?

## Question 6

A) Drawn below is a diagram showing the alveolus. Study it and answer the questions that follow. (5)



i)Label parts 1,2.

- ii) Name blood vessels X and Y
- iii) What is the importance of structure 3?
- iv) What type of cells are present in lumen of the trachea?

B) Give reasons for the following statements.

i)A plant cell has its nucleus on the side.

ii) Anemophilous flowers have dry light pollen grains.

iii)Respiration is a catabolic process,

iv)We get excess pain when we exercise in excess

.v)seeds should not be sown too deep