**MUKINDURI MIXED DAY SECONDARY SCHOOL**

**MIDTERM EXAM TERM 2 2017**

**BIOLOGY FORM 2**

**NAME……………………………………………………..ADM……………**

**ANSWER ALL THE QUESTIONS IN THE SPACES PROVIDED .**

1. a) What is diffusion ? (1mk)

b)State three factors that affect the rate of diffusion. (3mks)

1. The equation below represents a process that takes place in plants.

6CO2 + 6H2O C6H12O6

1. Name the process (1mk)
2. State two conditions necessary for the process to take place. (2mks)
3. State what happens to the end-products of the process. (3mks)
4. a)The action of ptyalin stops at the stomach . Explain. (2mks)

b) Name a factor that denatures enzymes. (1mk)

c)State two features that increase the surface area of small intestines. (2mks)

1. The diagram below represents the lower jaw of a mammal .

a)Name the mode of nutrition of the mammal whose jaw is shown. (1mk)

b)State one structural and one functional differences between the teeth labeled J and L. (2mks)

1. i) Name the toothless gap labeled K. (1mk)

 ii)State the function of the gap. (1mk)

d)Name the substance that is responsible for hardening of teeth. (1mk)

1. a)Name one salivary gland in humans. (1mk)

b)State two functions of saliva. (2mks)

1. Give three factors that determine the amount of energy a human being requires in a day. (3mks)
2. The diagram below represents a transverse section through a plant organ.
3. i) From which plant organ was the section obtained? (1mk)

ii)Give two reasons for your answer in (a)(i) above. (2mks)

1. Name the parts labeled J, K and L. (3mks)
2. State two functions of part labeled M. (2mks)
3. a)State two structural and two environmental factors that affect the rate of transpiration in plants.

Structural (2mks)

Environmental (2mks)

b) Name two types of transpiration. (2mks)

1. a)State three structural differences between arteries and veins in mammals. (3mks)

b)Name a disease that causes thickening and hardening of arteries. (1mk)

1. a) Name three types of blood cells. (3mks)

b)Other than blood cells, what is the other component of blood. (1mk)

1. a) Name the blood vessel that
2. carries blood from the aorta to the kidney (1mk)
3. contains high concentration of glucose from small intestines to the liver. (1mk)
4. starts in capillaries and ends in capillaries. (1mk)

b)State two differences between open and closed circulatory systems. (2mks)

1. The diagram below shows a specialized plant cell.



1. i)Name the cell (1mk)

ii)Name the parts labeled A,B and C (3mks)

1. State the functions of part labeled C (1mk)
2. State the function of the following cell organelles.
3. Ribosomes (1mk)
4. Lysosomes (1mk)