GATITU SECONDARY SCHOOL P.O. BOX 327 GATUNDU
END OF TERM TWO EXAM BIOLOGY FORM 3 PAPER 1

NAME_____CLASS_____ADM_____

Attempt all questions.

1a) Which biological name is give to biological catalyst found in living cells that speed up the rate of chemical reaction. (1mk)

b) Name the two building blocks of lipids
i)

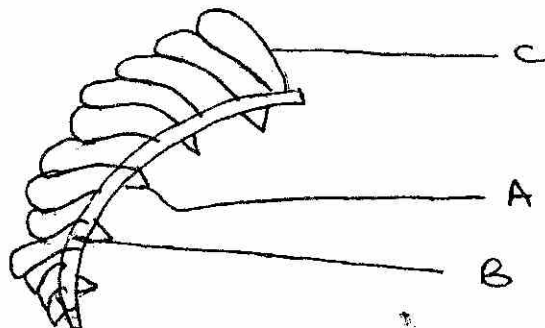ii)   (2mks)

2.a) Name the blood vessel that transport blood from:
i) Heart to the Lungs   (1mk)

ii) Small intestines to the liver (1mk)

b) Explain why blood from a donor whose blood group A cannot be transfused into a recipient whose blood group is B   (2mks)

3. The diagram below represent the gill of a bony fish. Study it and answer the questions below.

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i)   Name the part labeled   3mks
        A
        B
        C

ii)   State the function of the part labeled B   (1mk)

iii)   Give three adaptations of how C is adapted to perform its function (3mks)

4. The diagram below represent gaseous exchange site in a plant.
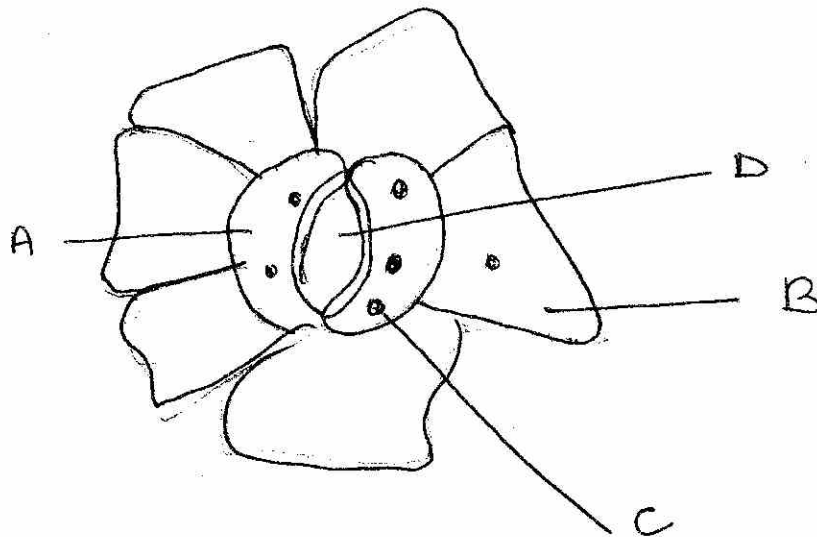
i)   Name the cells labeled. (2mks)
        A

        B

ii)   What is the main function of the cell labeled A   (2MKS)

iii)   When a leaf is exposed to bright light, and is supplied with plenty of water, what two
        substances would be moving out of the part of the leaf D.   2mks

        a

        b

iv)   In what kind of environment would you expect to find
        a) Plant with stomata on the upper surface   (1mk)

        b) Plant with stomata on the lower surface   (1mk)

5. Below is an equation showing aerobic breakdown of a certain substance.

$$C52 \; H_{98} \; O_6 + 148 \; O_2 \longrightarrow 10_2 \; Co_2 + 98 \; H_2O + Energy$$

i)   Calculate the respiratory quotient of the breakdown   (3mks)

ii)   Identify the food substance being oxidized   (1mk)
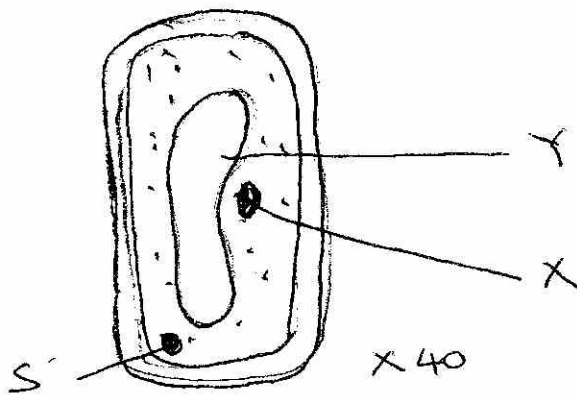
iii)   Name the end product of respiration in plants when there is insufficient oxygen. (2mks)

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7. State the function of each of the following organelles (2mks)

i) Nucleolus

ii) Golgi apparatus

8. The diagram below represents a cell seen under the light microscope.
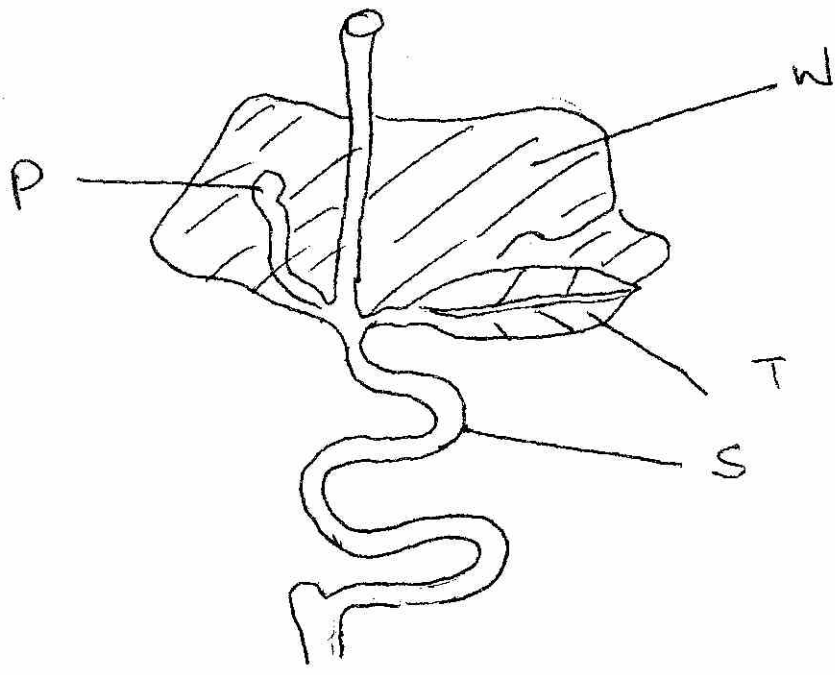
X 40

a) Name the part labeled (2mks)

X

Y

b) State function of part labeled (2mks)

S

Y

c) The diameter of the above drawing(image) is 1mm 3mm
   Calculate the diameter of the actual cell in Micrometer. (3mks)

8. The diagram below represent a part of human alimentary canal

i)   Label parts   3 m k>

         P

         W

         T

ii)   Name three contents of the part labeled T   3mks
                       Secretion from

iii)   Give two adaptations of the part labeled S to its function   2mk>

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