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ii) Construct an identification table to identify each organism (3 Marks)

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iii) Classify Organism S up to class level (3 Marks)

Kingdom-.....
Phylum-.....
Class-.....

iv) A student classified Organism U as shown below

Kingdom: Animalia

Phylum: Chordata

Class: Mammal

a) Identify one mistake in her classification (1 Mark)

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b) State one factor which she considered when classifying the organism in Phylum Chordata (1 Mark)

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v) Outline two ways in which Organism R is adapted to survive in its habitat (2 Marks)

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vi) To which class does Organism P belong? (1 Mark)

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2. You are provided with solution J (Milk), solution K, solution L (An acid), Solution M (A base) and Solution N (Distilled water)

a) Label three test tubes A, B and C.

- To Test tube A, measure 2 ml of Solution K and add 3 ml of Solution M
- To Test tube B, measure 2 ml of Solution K and add 3 ml of Solution N
- To Test tube C, measure 2 ml of solution K and add 3 ml of Solution L

Save the remaining Solution J for Question 3.

i) To test tube A, add 2 ml of Solution J. Record your observations below. (2 Marks)

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ii) To Test tube B add 2 ml of Solution J. Record your observations below. (2 Marks)

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iii) To Test tube C, add 2 ml of Solution J. Record your observations below. (2 Marks)

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b) Account for your observation in Test tube B and C (3 Marks)

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c) Account for your observation in Test tube A (2 Marks)

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d) What is the identity of Solution K (2 Marks)

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e) Name one gland in the human body which produces Solution K (2 Marks)

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3.

i) Using the reagents provided, conduct a food test. (9 Mark)

FOOD	PROCEDURE	OBSERVATION	INFERENCE

ii) Name the class of Kingdom Animalia whose members produce milk.

(1 Mark)

ITETANI GIRLS' HIGH SCHOOL
P.O. BOX 2220 – 90100
MACHAKOS

TERM ONE, 2018
FORM FOUR
BIOLOGY 231/3

CODE: 1001

CONFIDENTIAL

EACH STUDENT WILL REQUIRE:

1. 6 Test tubes
2. 3 labels
3. 4 10ml measuring cylinder
4. 10ml of Solution K in a beaker
5. 10ml of Solution M in a beaker
6. 10ml of Solution N in a beaker
7. Solution L
8. 12ml of Solution J
9. Iodine solution supplied with a dropper
10. Sodium hydroxide solution supplied with a dropper
11. 5% copper (ii) sulphate solution supplied with a dropper
12. DCPIP solution supplied with a dropper

SOLUTIONS:

1. Solution J – Unboiled fresh milk
2. Solution K – Renin
3. Solution L – 2M Ethanoic acid.
(Slowly add 12ml of conc. Ethanoic acid to 85ml of distilled water in a measuring cylinder. Top up with distilled water up to the 100ml mark. Pour the solution into a beaker and stir)
4. Solution M – 2M sodium hydroxide
(Measure 8g of sodium hydroxide pellets and dissolve in 100ml of distilled water)
5. Solution N – Distilled water