**Name:** ………………………………………………..…**Adm No**: ….…………**Class:** ………… **Candidate’s Sign**: ………...............**Date:** ………………..........................................

**OPENER EXAMS**

**TERM 3 2023**

**FORM ONE BIOLOGY**

1. Name the branch of biology that deals with the study of. (3 marks)
2. Insects.

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1. Inheritance and variation.

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1. Organism relation and their surrounding.

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2. State the characteristic of living things shown by (1 mark)

a)………………………………………………………………………………………………………....

b)………………………………………………………………………………………………………....

3. Define the following terms.

a) Cell -

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 b) Development –

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c) Excretion –

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4. State one use of the following. (4 marks)

a) Pit fall trap.

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b) Pair of forceps.

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c) Bait in a bait trap.

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1. Chloroform.

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5. Distinguish between gaseous exchange and respiration. (2 marks)

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6. Give three differences between a maize plant and a zebra. (3 marks)

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7. Name two skills required when one is making a drawing with a magnification. (2 marks)

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8. State the two importance of movement in animals. (2 marks)

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9. The length of a real specimen is 3cm3 calculate the linear magnification from the image below. (2 marks)



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b) Name the apparatus that was used when the image was made. (1 mark)

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10. Give 3 differences between light and electron microscope. (3 marks)

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11. Give two functions of each of the following.

 a) Golgi apparatus. (2 marks)

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b) Rough endoplasmic reticulum. (2 marks)

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12. Name the organelles that perform the following functions.

a) Destroy the entire cells (1 mark)

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b) Manufacture of food in presence of sunlight and water. (1 mark)

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13. Give reason for the following activities when preparing a temporary slide. (3 marks)

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a) Adding a drop of iodine solution to the specimen of the slide.

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b) Adding water on a plant section.

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c) Using a sharp scapel/Razor blade.

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14. Plant cell do not burst when placed in distilled water.

 Explain. (2 marks)

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15. The diagram below shows a specialized cell. (3 marks)



1. Name the cell.

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b) Function of the cell.

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c)State it adaptation/modification to its function.

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16a. During magnification using light microscope an image appeared bulled. Name the part to adjusted for image to appeal clear. (1 mark)

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b) Explain why the stage of a microscope should be dried before specimen slide is placed. (1 mark)

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17. How do the following factors affect diffusion. (2 marks)

a) Temperature.

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1. Concentration gradient.

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18. Distinguish between haemolysis and plasmolysis. (2 marks)

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19.In an investigation a student extracted 3 pairs of paw paw cubes and placed them in a beaker containing a solution. Results after 40 minutes where as shown below.

Account for the results. (3 marks)

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b) Suggest a suitable control experiment. (1 mark)

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1. Give one importance of the physiological process being investigated above.
2. In animals. (1 mark)

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1. In plants.

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d) Name the physiological process that requires energy. (1 mark)

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