

**SENIOR ONE
BIOLOGY
TIME: 1.30 Minutes**

NAME.....CLASS:

INSTRUCTIONS:

- Answers to section A must be written on answer grid below.

- Answers to section B must be written in the space provided

SECTION A (20 MARKS)

1	6	11	16
2	7	12	17
3	8	13	18
4	9	14	19
5	10	15	20

1. The instrument below is used in the laboratory for magnifying. The name of the instrument is called?



- A. Magnifier
- B. Hand lense
- C. Microscope
- D. Forceps

2. Which one of the following pair characteristics in living things is shown by a baby who touched a hot spoon and immediately withdraw its hand?
- A. Growth, movement
 - B. Sensitivity and locomotion
 - C. Sensitivity and movement
 - D. Respiration and excretion
3. If the eye piece is marked **x10** and the magnification of the objective lens is **x40**, what is the total magnification of a microscope?
- A. X 400
 - B. X 10
 - C. X 20
 - D. X 40
4. Which one of the following reflects light from external source through the specimen
- A. Diaphragm
 - B. Mirror
 - C. Condenser
 - D. Eye Piece

5. Mosquitoes and other insects can be a big problem in the district. There should be an officer to deal with the insects. The officer should have studied a branch of Biology called?
- A. entomology
B. insectology
C. pathology
D. parasitology
6. Unicellular organism are organism made up of;
- A. One cell
B. Many cells
C. Two cells
D. More cells
7. The major differences between plant and animal cell is that plant cells posses
- A. Protoplasm
B. Tonoplasm
C. cellulose cell wall
D. mitochondrion
8. A microscope filled with a X5 eyepiece and a X20 objective lens will magnify an object.
- A. X100
B. X25
C. X250
D. X4
9. At what level of organization can the heart muscles be found?
- A. Cell level
B. Tissue level
C. Organ level
D. System level.
10. Select the statement that is false.
- A. All living things are able to reproduce
B. All living things locomote
C. All living things get rid of excretory materials
D. All living things are able to grow
11. The magnification of a drawing can be calculated using the formula.....
- A. $\frac{\text{Linear dimension of drawing}}{\text{Linear dimension of object}}$
B. $\frac{\text{Linear dimension of object}}{\text{Linear dimension of drawing}}$
C. Linear dimension of drawing + linear dimension of object
D. Linear dimension of object x linear dimension of object
12. Which one of the following should not be done when working with a microscope?
- A. Pick up the microscope by its stand and main frame
B. Use stage clips for holding a slide
C. Start with the highest magnification and change to the lower one
D. Cover the specimen on the glass slide with a cover clip.
13. Which one of the following is not an organ
- A. Heart
B. Kidney
C. Stomach
D. Muscle
14. The smallest unit of a living thing is
- A. organ
B. Cell
C. Tissue
D. System
15. Which one of the following characteristics of living organisms leads to continuity of life
- A. Genetics
B. Reproduction

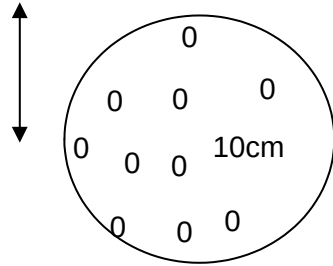
C. Sensitivity

D. Growth

16. Which one of the following shows the correct order of cell organization?

- A. Organism → system → organ
- B. Tissue → organ → organism
- C. Organ → tissue → organism
- D. Tissue → organ → system

17. Below is the diagram of an Irish potato



If the real Irish potato had a width of 5cm, the magnification is;

- A. X2
- B. X0.5
- C. X7.5
- D. X5

18. Which one of the following parts of a cell controls the activities of a cell

- A. Cell nucleus
- B. Vacuole
- C. Cytoplasm
- D. mitochondria

19. The study of bones and muscles in the body is?

- A. Botany
- B. Physiology
- C. Anatomy
- D. Physiotherapy

20. The figure shown is part of a microscope, what function does it perform



- A. For looking at the specimen placed on the stage
- B. For directing the light to the object placed at the stage
- C. For reducing the light intensity
- D. Placing the image to be viewed

SECTION B

21. A group of biologists made a study on the abundance of the elephant grass in a forest and also observed the number of elephants in the same forest in different month of the year they discovered the following as shown in the table.

Month	January	March	May	July	September	November
Elephant number	04	8	15	02	100	110
Number of elephant grass	200	80	20	300	02	00

(a) Name any two branches of biology that were used in the forest. (2 marks)

.....

.....
(b) Which month had the;

i. Highest number of elephant? (1 marks)

.....
ii. Lowest number of elephant grass? (1 mark)

.....
(c) State the difference in the number of elephant between;

iii. January and March. (1 mark)

.....
iv. July and September. (1 mark)

.....
(d) What is the total number of elephants in the month of May and July (2 marks)

.....
(e) Give seven characteristics that make the elephant grass and the elephants living (7 marks)

.....
(f) Give any five differences between elephants and elephant grass (5 marks)

Elephants	Elephant grass
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(i)	
(ii)	
(iii)	
(iv)	
(v)	

22. (a) In the space below draw an animal cell and label the parts (5 marks)

(b) Give the functions of any three parts labelled (3 marks)

Part	function

(c) Complete the table below (2 marks)

Eye piece lens	Objective lens	Magnification
X15	X7	
X60		X240
X17		X340
X25	X8	

END

