

NAME: FORM:

INSTRUCTIONS:

1. This test consists of **TWO** sections.
2. Section **ONE (1)** consists of **TWENTY (20)** multiple choice questions and Section **TWO (2)** consists of **THREE (3)** short answer questions
3. All Questions must be answered.

SECTION ONE: Multiple Choice

Instructions: Read each question carefully and select the correct answer.

1. Which of these scientists invented telephone:
 - (a) Marie Curie
 - (b) Alexander Graham-Bell
 - (c) Thomas Edison
 - (d) Isaac Newton
2. In which step of the scientific method do scientists use video cameras and iPods?
 - (a) Observing
 - (b) Recording
 - (c) Hypothesising
 - (d) Experimenting
3. What was the best reason for inventing telephones?
 - (a) To talk to friends
 - (b) To communicate over long distances and to send messages quickly
 - (c) To get news
 - (d) To communicate whenever you're tired
4. Which of the following is a safety rule one must **NOT** follow in the Lab?
 - (a) Follow all instructions given
 - (b) Do not play in the Lab
 - (c) Eat in the Lab
 - (d) Do not taste chemicals
5. All of the following are characteristics of a mango tree except:
 - (a) Breathing
 - (b) Respiration
 - (c) Nutrition
 - (d) Reproduction
6. Animals without a backbone are called:
 - (a) Vertebrates
 - (b) Invertebrates
 - (c) Crawlers
 - (d) Worms
7. Which of the following is a mammal?
 - (a) Snake
 - (b) Dog
 - (c) Tree frog
 - (d) Lizard
8. Which of the following is the correct arrangement from smallest to largest?
 - (a) Tissue, Cell, Multicellular organism
 - (b) Cell, Organ, Tissue
 - (c) Cell, Tissue, Organ
 - (d) Tissue, Cell, Organ
9. What is the main function of the respiratory system?
 - (a) To filter air
 - (b) To take in oxygen and let out carbon dioxide
 - (c) To take in air only
 - (d) To take in carbon dioxide and let out oxygen
10. The main organ of the respiratory system is the:
 - (a) Lungs
 - (b) Nose
 - (c) Heart
 - (d) Trachea
11. The trachea is also known as the:
 - (a) Larynx
 - (b) Voice box
 - (c) Windpipe
 - (d) Pharynx
12. Which of the following materials can be used to make a model of the trachea?
 - (a) Straw
 - (b) A stick with springs around it
 - (c) Hose
 - (d) A straw with springs around it
13. Which of the following is true about the respiratory system?
 - (a) It has two pairs of lungs
 - (b) The mouth filters the air
 - (c) The nose filters the air
 - (d) It has two voice boxes

14. Why do living organisms need oxygen?

- (a) To breathe
- (b) To make food
- (c) To make energy
- (d) To store it

15. The particles in a solid are:

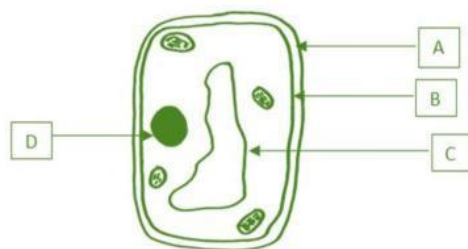
- (a) widely spaced
- (b) loosely spaced
- (c) tightly packed
- (d) in random motion

Total 20 marks

SECTION TWO: Short Answer.

Instructions: Answer ALL questions in this section in the spaces provided.

1. Figure 1 shows a diagram of a cell. Use the words at the side to help label the parts of the cell.



VACUOLE; NUCLEUS; CELL WALL;
CELL MEMBRANE; MITOCHONDRION

Figure 1. Diagram of a cell.

i. Label the letter a, b, c & d in the diagram above.

A:

B:

C:

D:

(4 marks)

ii. What type of cell is the diagram showing above?

..... **(1 mark)**

iii. State the function of C and D in the diagram above.

Structure C:

.....

Structure D:

.....

(4 marks)

b) What is a cell?

.....
.....

(2 marks)

c) Complete the flowchart below which outlines the formation of a multicellular organism. (**Systems; Organs; Tissues; Fats**).



(3 marks)

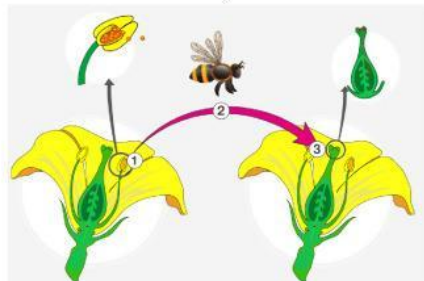
- e) Name any **TWO** specialized cells in the human body?

.....

(2 marks)

Total 20 marks

- 2) (a) Study the diagram below then answer the questions which follow:



- (i) Name the plant process shown in the diagram above:

.....

- (ii) What is the agent that helps with the process in (b)(i) above ?

.....

- (iii) Identify the **TWO** parts of the flower that are involved in the process taking place:

Part 1 :

Part 2:

(4 marks)

- (b) Match the parts of the flower in **column A** to their function in **column B**. An example is done for you.

Column A	Column B
Parts of the flower	Functions for the parts of the flower
A) Petal	___ protects the young flower
B) Ovule	___ supports the entire flower
C) Stigma	___ makes pollen grains
D) Ovary	<u>B</u> forms the seed after fertilization
E) Anther	___ attracts insects for pollination
F) Receptacle	___ traps or collects pollen grains during pollination
G) Sepal	___ holds up or supports the stigma
H) Style	___ forms the fruit after fertilization

(7 marks)

Total 11 marks

3. (a) What is a Matter?

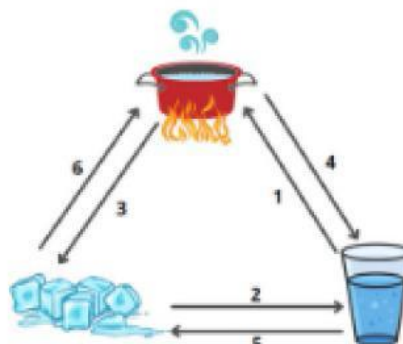
.....

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(1 marks)

(b) Study the diagram below and label the change in the state of matter occurring at 1, 3 & 5. Use the words below to help identify the change of state.

**SUBLIMATION; CONDENSATION; FREEZING;
MELTING; RESUBLIMATION; EVAPORATION**



1:

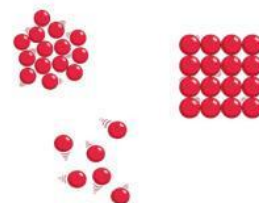
3:

5:

(3 marks)

(c) In the box below, insert the diagram which shows the arrangement of the particles of a solid and liquid.

Solid	Liquid



(4 marks)

(d) Complete the table below that explains the properties of the state of matter.

Solid	Liquid	Gas
Has a fixed shape		
		Have a lot of energy
	Particles arranged close to each other, with some space to move	

(6 marks)

Total 14 marks

Total 65 Marks
End of Exam

