



Science

Year 7

**MARCH EXAMINATION 2021**

**1 hr. 30 min**

Additional Materials:

- Soft clean eraser
- Soft pencil (type B or HB recommended)

Read these instructions first

This paper contains 31 questions. Answer all questions in the spaces provided.

Do **not** use staples, paper clips, and glue or correction fluid.

Any rough working should be done in the rough work booklet provided.

NAME: .....

DATE: .....

SCORE:

TOTAL MARKS:

[Turn over]

1. What makes some plate cell green? (1mark)

.....

2. A leaf cell from Eucalyptus tree is 0.012mm wide. Calculate it's width at a magnification of x5000. ( 3 marks)

3. What does 'evidence' mean? Tick (✓) one box. (1 mark)

A the name given to a certain type of disease

B changes in the way that the body works

C information used to say whether something is right or wrong

D A type of test performed by a doctor

4. Which of the following best describes the heart? Tick (✓) one box (1 mark)

a) An organ

b) A cell

c) A tissue

d) A system

5. State one job that the heart does. \_\_\_\_\_

6. Tick (✓) the living organisms in this list. (4marks)

Elephant.  Soccer ball.  robot.  Pine tree.

Aeroplane.  Human.  Desert.  Mouse.

7. Draw one line from each letter to a life process. Then draw one line from each life process to its meaning. (7 marks)

M.	Nutrition.	Increasing in size
R.	Respiration.	Getting rid of waste
S.	Reproduction.	Making new life
G.	Growth.	Releasing energy
R.	Movement.	Changing position
E.	Sensitivity.	Detecting changes in the surroundings
N.	Excretion.	Needing substances to carry on living

8. What do humans need to respire? Tick (✓) two boxes

Oxygen.  Carbon dioxide.  Wood.  Fire

Food.       light.

9. Complete the following sentences using the words from the box. (5 marks)

Cell.	Cells.	Tissue.	Tissues.	Organ.	Organs.
-------	--------	---------	----------	--------	---------

The basic building blocks of all organisms are \_\_\_\_\_. A group of these building blocks of the same type and working together is called a \_\_\_\_\_. A \_\_\_\_\_ is an important part of a plant or animal. Each one is made of different \_\_\_\_\_. Which are made of smaller parts called..... For example, the heart is an .....that contains muscle \_\_\_\_\_ (Made up of muscle \_\_\_\_\_) and fat \_\_\_\_\_ (made of fat \_\_\_\_\_)

10. Use a pencil to (✓) one box to answer to each question. (3.Marks)

a. Which organ let's you think

A. Heart

B. Brain

C. Skull

D. Liver

c. A job of the stomach.

A. Store waste materials

B. Make urine

C. Break up food

D. Help you breath

F. A tube taking food to the stomach is the;

A. Intestine

B. Diagraph

C. Oesophagus

D. Trachea

11. Plants need a constant supply of? (2 marks)

- A. Light
- B. Water
- C. Wind
- D. Sugar

This is because of;

- A. They lose it by photosynthesis
- B. They lose it during digestion
- C. They lose it by reflection
- D. They lose it by evaporation

12. Give the name of the organ that humans use for sensitivity \_\_\_\_\_(1 mark)

13 The table below shows confidence grid . Tick one box for each statement in the table. (4 marks)

Statement	Definitely Correct	Might be Correct	Might be Wrong	Definitely wrong
Chloroplasts can be found in plant cells but not in animal cell				
Mitochondria can be found in animal cell but not in plant cell				
A cell surface membrane control what enters and leave the cell				
A group of cells of the same type form an organ.				

14. Give the name of the organ that plants use for nutrition..... ( 1 mark)

15. Suggest two reasons why rare animals are kept in zoos. (2marks)

I) .....

II).....

15. State two functions of a plant root. ( 2 marks)

I.....

ii.....

17. Ovaries are part of the female reproductive system. They contain different types of cells, including egg cells. Tick the box that best describes an ovary. (1 mark)

A. Organ system

B. Organ

C. Tissue

D. Cell



18a. What process produces the food stores in plants storage organs?. (1 mark)

,.....

b. Give the function not the leaf?..... (1 mark)

19. Draw two lines from each organ system to show two organs it contains; (8 marks)

Life process.	Organ system.	Organs
Excretion.	Breathing system.	Bladder
		Bone
Movement.	Locomotor system.	Brain
		Kidney
Respiration.	Nervous system.	Lung
		Muscle
Sensitivity.	Urinary system.	Spinal cord
		Trachea

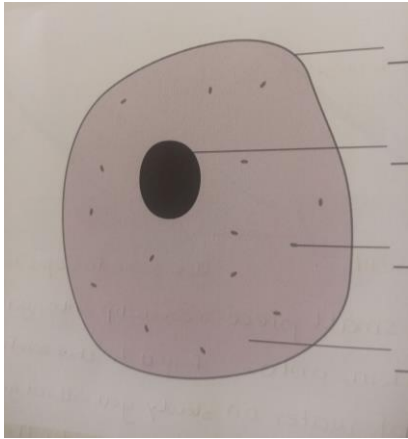
19.a. What is a specimen?.....(1 mark)

b. What is a microscope used for?..... (1 mark)

c. Complete the table (6Marks)

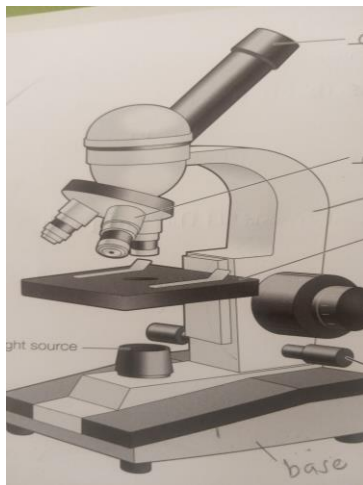
Eyepiece lens power	Objective lens power	Total magnification
×5	×10	
×7.5	×15	
	×20	×200

20.. The diagram shows an animal cell , label the parts. (4 marks)



21. Complete  
of the parts (4

the labels on the microscope, to show the names  
marks)



22. Draw a line from each stage of the scientific method to its definition. (4 marks)

Stage.	Definition
Observation.	Information collected from an experiment
Hypothesis.	What will happen if a hypothesis is correct
Prediction.	Something that was seen ( can lead to a question)
Data.	An idea that could answer a question

23. Use words from the box to answer the questions . You may use each word more than once. (5 marks)

Egg cell.	Gamete.	Sperm cell.	Zygote
-----------	---------	-------------	--------

- A scientific word that means a sex cell .....
- The meaning of the word ovum.....
- A male sex cell of an animal.....
- A female sex cell of an animal .....

e) A scientific word that means a fertilized egg cell.....

24. Is a blood vessel an organ system, an organ or a tissue?..... (1 mark)

25. Draw a line from each scientific term to its definition. (4 marks)

<b>Scientific term.</b>	<b>Definition</b>
Implantation.	When male and female gamete nuclei fuse
Pregnancy.	When semen leaves the erect penis
Fertilization.	When an embryo sinks into the uterus lining
Ejaculation.	When the baby develops from a zygote in a woman's uterus

26. Number the stages of labour on the order in which they happen. The first one has been done for you. ( 3marks)

( ) The muscles in the uterus wall start to contract

( ) The uterus muscle contract strongly to push out the placenta

- ( ) The uterus muscles contract very strongly and push the baby out of the vagina
- ( ) The cervix muscle relax , making the cervix wider.

27. Complete the following sentences using the words from the box. (6 marks)

Adolescence.	Acne.	Emotional.	Ovaries.	Sex hormones
--------------	-------	------------	----------	--------------

During puberty, more .....are released in the body. In the body, these substances are produced by the ..... In girls, these substances are produced by the.....and brain. These substances cause physical changes and can also cause..... Apart from physical changes, they also cause..... Changes, which are a natural part of.....

28. Write (M) in the box beside a medicine or (R) beside a recreational drug. (2 marks)

- ( ) Paracetamol
- ( ) Heroin
- ( ) Cocaine
- ( ) Ibuprofen
- ( ) Salbutamol ( in asthma inhaler)
- ( ) Caffeine ( in coffee)

29. Complete the sentences about blood using words from the box. (4marks)

Plasma.	Red blood cells.	White blood cells.
---------	------------------	--------------------

- a) Nutrients and waste are carried in blood dissolve in.....
- b) Oxygen is carried by hemoglobin found in.....
- c)..... help to fight infection
- d) .....have a special disc shape with a large surface area.

30. Students recorded the eye color for everyone in their class in this table. (3 marks)

Eye color	Brown	Grey/blue	Green
Number of students	18	11	4

- a) Does eye color show continuous or discontinuous variation?\_\_\_\_\_

b) Describe how the data in the eye color table should be displayed, giving a reason for your answer.

31. State what happens during ovulation. (4 marks)

.....

.....

.....

.....