

SCIENCE 513/01

Paper 1 For examination from 2025 - 2027

SPECIMEN 1 hour

Additional materials required: Multiple Choice answer sheet

Soft clean eraser

Soft pencil (type B or HB recommended).

READ THESE INSTRUCTIONS FIRST

Write in soft pencil.

Write your centre number, candidate number and name on the answer sheet in the spaces provided unless this has been done for you.

There are **forty** questions on this paper.

Answer all questions.

For each question there are four possible answers A, B, C and D.

Choose the **one** you consider correct and record your choice in **soft pencil** on the separate Answer Sheet.

Read the instructions on the separate answer sheet carefully.

Each correct answer will score one mark. A mark will not be awarded for a wrong answer. Any rough work should be done on this Question Paper and not on the Answer Sheet.

- 1 Which group of words represents characteristics of living things?
 - A move, respire, and reproduce
 - B respond, hear and respire
 - C die, reproduce and move
 - **D** feed, die and see
- 2 What kind of animal has large and obvious canine teeth?
 - A carnivore
 - **B** herbivore
 - **C** omnivore
 - **D** reptile
- 3 Fig. 3.1 shows the Sun and the Earth.

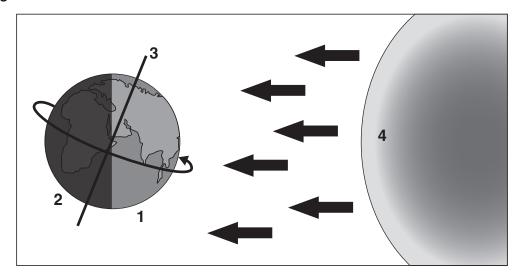
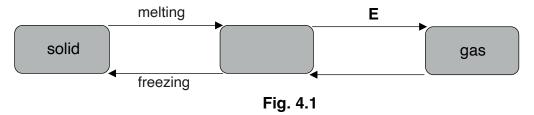


Fig. 3.1
Which row shows the correct labels in Fig. 3.1?

	1	2	3	4
Α	axis	night	day	Sun
В	night	axis	Sun	day
С	day	night	axis	Sun
D	day	axis	Sun	night

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4 Which process is represented by the letter E in Fig. 4.1?



- A solidification
- **B** evaporation
- **C** boiling
- **D** liquid
- 5 Fig. 5.1 shows some organs of the human body.

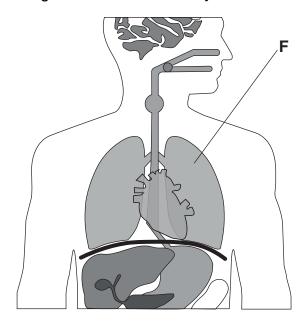


Fig. 5.1

What is the function of the organ labelled **F** in Fig. 5.1?

- A absorption of digested food
- **B** pumping blood to the body
- **C** removing toxic waste from the body
- D where exchange of gases occurs during breathing

- **6** Siphiwe is a fourteen-year-old girl and has noticed some changes in her body. Which change in Siphiwe's body is a secondary sexual characteristic?
 - A widening of hips
 - **B** deepening of voice
 - C enlargement of stomach
 - **D** growth of hair on the chest
- 7 Which gas is used to extinguish a fire that is burning in the school Library?
 - **A** air
 - **B** oxygen
 - **C** nitrogen
 - **D** carbon dioxide
- 8 Steve Jobs invented the Apple cell phone.

What is an inventor?

- **A** A person who improves a product.
- **B** A person who makes a new product.
- **C** A person who brings a solution to a problem.
- **D** A person who makes a product that existed before.
- **9** Fig. 9.1 shows the human alimentary canal.

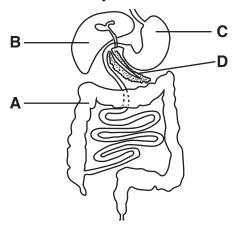


Fig. 9.1

Which organ, A, B, C or D is the large intestine?

- 10 Plants need various factors for life and growth.
 - Which factor is provided by fertilisers?
 - A light
 - **B** water
 - **C** nutrients
 - **D** carbon dioxide

Use Fig. 11.1 to answer questions 11 and 12.

11 Fig. 11.1 shows the water cycle.

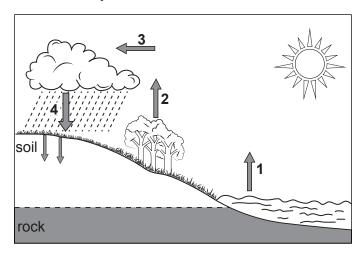


Fig. 11.1

Which row, A, B, C or D shows the correct processes?

	1	2	3	4
Α	evaporation	condensation	precipitation	freezing
В	transpiration	evaporation	condensation	precipitation
С	heating	ting transpiration precipitation condensa	condensation	
D	evaporation	transpiration	condensation	precipitation

12 Which number represents the formation of ice in Fig. 11.1?

- **A** 1
- **B** 2
- **C** 3
- **D** 4
- 13 A cat eats mice that feed on maize.

Which type of organism is represented by the cat, mice and the maize in the feeding relationship?

	mice	cat	maize
Α	producer	herbivore	carnivore
В	herbivore	producer	carnivore
С	herbivore	carnivore	producer
D	carnivore	herbivore	producer

14 Fig. 14.1 shows the front view of the male reproductive system.

What is the function of the part labelled **G** in the diagram?

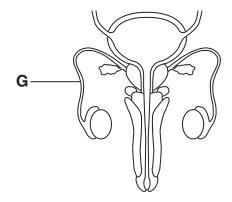
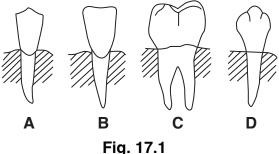


Fig. 14.1

- Α carry sperms from the testes to the penis
- В passage of sperms out of the body
- C carries urine to the penis
- produces sperms
- 15 Which activity results in a physical change?
 - A frying an egg
 - В burning firewood
 - C making ice block
 - cooking porridge
- 16 Sound can travel through different mediums. In which medium can sound travel?
 - Α solids only
 - В solids and liquids
 - С liquids and gases
 - solids, liquids and gases
- 17 Fig. 17.1 shows teeth found in the human mouth.



Which tooth A, B, C or D is an incisor?

18 Fig. 18.1 shows a food web

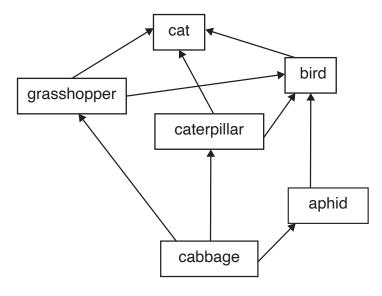


Fig. 18.1

Which organism in the food web is a primary consumer?

- A cat
- **B** bird
- **C** cabbage
- **D** caterpillar
- **19** Fig. 19.1 shows apparatus used to separate a mixture of sand and water.

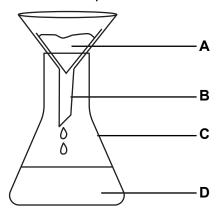


Fig. 19.1

Which part, A, B, C or D is the sand collected after filtration?

- 20 Which technology product can prevent wastage of electricity at home?
 - A filament bulb
 - **B** refrigerator
 - C solar cells
 - **D** television

21 Fig. 21.1 shows part of a life cycle of a cow.

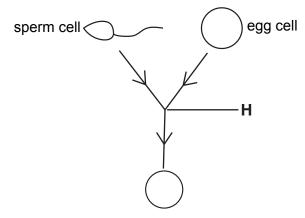


Fig. 21.1

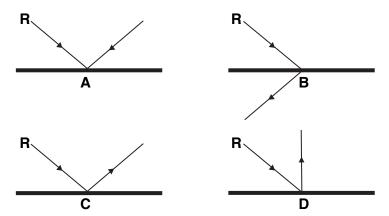
What is the name of the process labelled H?

- A sexual intercourse
- **B** reproduction
- **C** fertilization
- **D** pollination
- **22** Which of the following statements is true about the digestion of food?
 - A digestion of food begins in the stomach.
 - **B** final digestion takes place in the small intestine.
 - **C** food is stored for a short time in the large intestine.
 - **D** undigested food is stored in the anus.
- 23 Which mixture can be separated by sorting by hand?
 - A white maize and yellow maize
 - B coarse sand and clay
 - **C** iron filings and iron
 - **D** sand and sugar

24 Light rays can be reflected by different objects.

A ray **R** is reflected by a mirror.

Which diagram shows the reflected ray R.



25 Fig. 25.1 shows rays of the sun shining on a leaf.

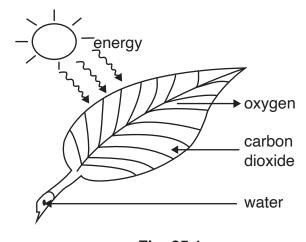


Fig. 25.1

What is the name of the process taking place in the leaf?

- **A** evaporation
- **B** photosynthesis
- **C** reflection
- **D** transpiration
- 26 A hen sat on its eggs for three weeks.

What is this stage in the life cycle of a chicken called?

- A laying
- **B** brooding
- **C** incubation
- **D** gestation

- 27 Which of the following is a common source of light?
 - **A** moon
 - **B** planets
 - C stars
 - **D** mirror
- 28 Which unit is used to measure the mass of an object?
 - A g/cm³
 - B cm³
 - **C** g
 - **D** ml
- **29** The pull of gravity depends on the mass of an object. Which object has a stronger gravitational pull?
 - **A** 30 kg
 - **B** 50 kg
 - **C** 8 000 g
 - **D** 40 000 g
- **30** Fig. 30.1 shows the female reproductive system.

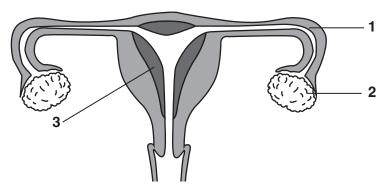


Fig. 30.1

Which parts are correctly matched with their function?

	produces ova	where fertilization occurs	where the embryo develops
Α	2	1	4
В	2	3	4
С	4	2	3
D	2	1	3

				11	
31	31 What is the name given to the part of a plant that develops into a ne				
	A B C D	flower fruit ovary seed			
32	People use science and technology in their daily lives.				
	Which scientific idea does not match with the use in daily life.				
	A B C D	friction communication refrigeration doors food preservation		magnets	
33 A stone is an example of matter. What are the main characteristics of the stone that prove it is matte					?
	٨	it is very hard to bree	ak		

- A it is very hard to break
- B it has mass and volume
- C it has weight and volume
- D it has weight and density
- **34** Which activity shows irritability?
 - A a grasshopper running away from a hen
 - B a grasshopper becoming larger in size
 - C a grasshopper laying eggs in a hole
 - D a grasshopper breathing in
- **35** Banana is an example of a solid.

Which characteristic shows that banana is a solid?

- A its volume changes
- B it has a fixed shape
- C it has mass and volume
- **D** it takes the shape of a container

36 Which characteristic of light is represented by Fig. 36.1?

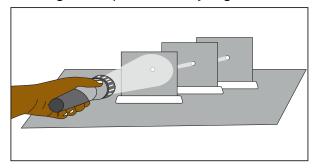


Fig. 36.1

- A is made up of a beam
- B travels fast
- C is made up of many colors
- D travels in a straight line
- **37** Which planet is the fourth planet from the sun?
 - **A** mercury
 - **B** jupiter
 - C mars
 - **D** venus
- 38 Which object is magnetic?
 - A wood
 - **B** glass
 - **C** rubber
 - **D** spoon
- **39** The following lists consist of different instruments.

Which list consists of instruments for measuring mass?

- A ruler, lever arm balance, bathroom scale
- B lever arm balance, electronic balance, thermometer
- C measuring cylinder, top pan balance, spring balance
- **D** lever arm balance, electronic balance, bathroom scale
- **40** Sound is one of the forms of energy.

Which of the following is a way that sound can be produced?

- A through the vibration of a ruler
- **B** through the release of electricity
- C through the movement of light rays
- D through the repulsion between two magnets

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