



EXAMINATIONS COUNCIL OF ESWATINI
Eswatini Primary Certificate Examination

SCIENCE

Paper 1 Multiple Choice

513/01

October/November 2024

1 hour

Additional Materials : 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 in the spaces provided on the answer sheet unless this has been done for you.

There are **forty (40)** 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 on the separate Answer Sheet.

Read and follow the instructions on the separate Answer Sheet carefully.

Each correct answer will score **one** mark. A mark will not be deducted for a wrong answer.

Any rough work should be done on this Question Paper and **not** on the Answer Sheet.

- 1 Fig. 1.1 represents the changes of state of matter.

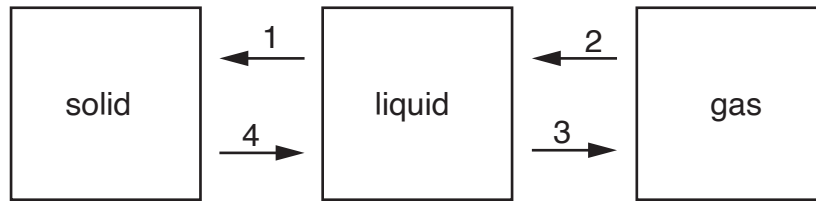


Fig. 1.1

Which row correctly represents the changes of state of matter?

	1	2	3	4
A	freezing	condensation	evaporation	melting
B	evaporation	melting	condensation	freezing
C	freezing	evaporation	melting	condensation
D	condensation	freezing	melting	evaporation

- 2 Fig. 2.1 shows white light passed through a glass prism.

What conclusion can be drawn about the behaviour of the white light in Fig. 2.1?

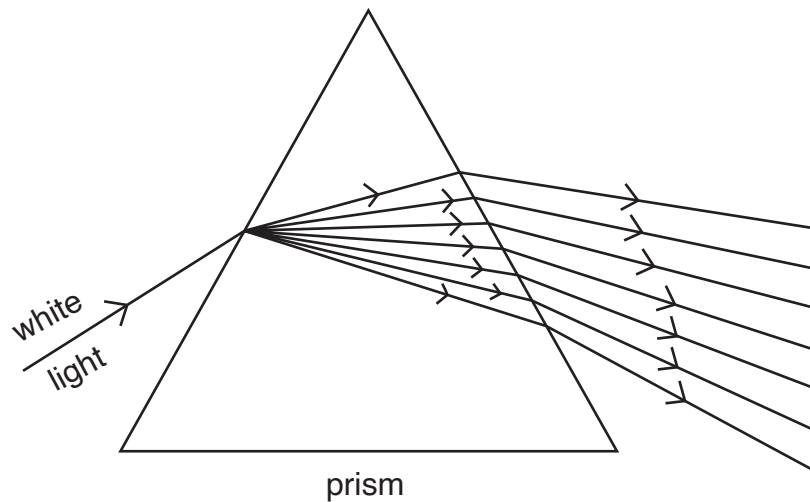


Fig. 2.1

- A** moves faster in a glass prism
- B** comes from different sources
- C** is made up of different colours
- D** does not pass through a glass prism

- 3 Which statement is correct about HIV?
- A is now curable
 - B affects the immune system
 - C does not affect newly born babies
 - D is only transmitted through sexual intercourse

- 4 Which property best describes liquids?

- A have no definite volume
- B have definite shape
- C have ability to flow
- D can fill up any container

- 5 Fig. 5.1 shows Eswatini's weather report on Sunday, 23 April 2023.













Manzini		25/18°C	Siteki		27/18°C
Mbabane		22/16°C	Piggs Peak		21/16°C
Big Bend		31/21°C	Vuvulane		29/21°C
Malkerns		26/19°C	Kwaluseni		25/18°C
Mhlume		21/20°C	Bhunya		24/15°C
Hluthi		26/19°C	Mhlambanyatsi		22/13°C

Fig. 5.1

Which statement best describes the weather in Mbabane and Bhunya on the 23rd of April 2023.

- A raining heavily with thunderstorms
- B partly cloudy with chances of rain
- C There was a heavy cloud cover
- D very hot and raining

- 6 Fig. 6.1 shows a vertebrate.

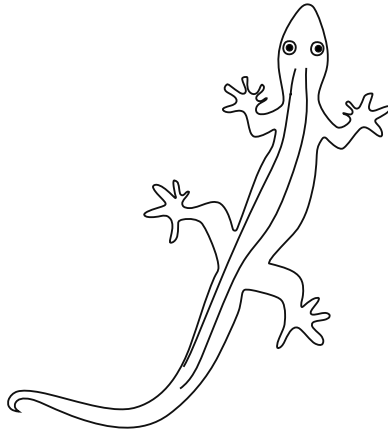


Fig. 6.1

Which letter represents the correct class of the vertebrate?

- A** lizard
 - B** reptile
 - C** mammal
 - D** amphibian
- 7 Fig. 7.1 is the human digestive system

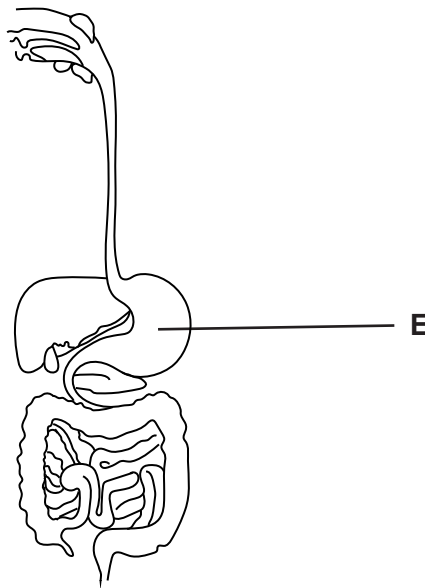


Fig. 7.1

What is the function of the part labelled **E** in Fig. 7.1?

- A** where mechanical digestion begins
- B** where water is temporarily stored
- C** where food is temporarily stored
- D** absorption of food

8 Which physical changes occur in boys and girls when they reach puberty?

	boys	girls
A	hips widen	menstruation begins
B	sexual organs become bigger	shoulders become broader
C	breasts develop	hair grows in armpits
D	voice becomes deeper	pubic hair grows

9 Fig. 9.1 shows parts of a flower.

Which row represents the correct parts of the flower?

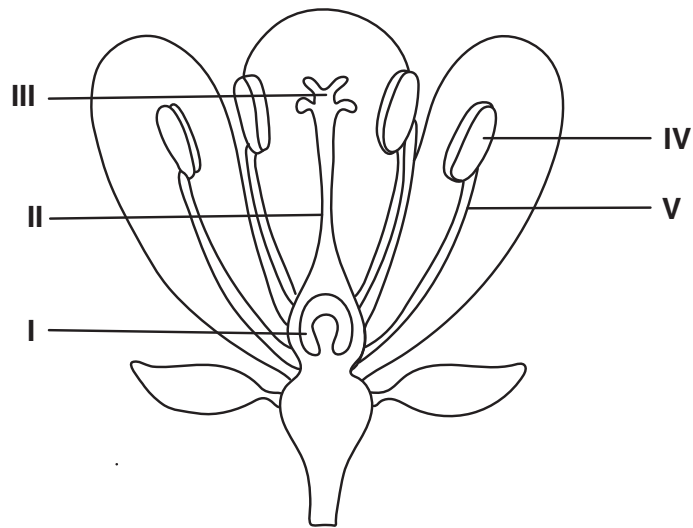


Fig. 9.1

	filament	anther	stigma	style	ovary
A	V	IV	III	II	I
B	IV	V	II	III	I
C	III	II	V	IV	I
D	II	III	I	V	IV

10 Fig. 10.1 shows the life cycle of a toad.

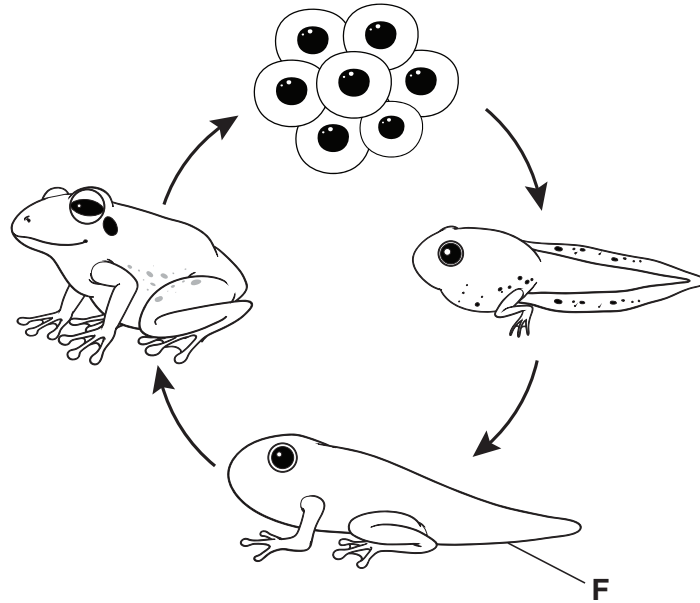


Fig. 10.1

Which stage does letter F represent in the life cycle of the toad?

- A tadpole
 - B embryo
 - C froglet
 - D larva
- 11 In which plant process do bees help?
- A photosynthesis
 - B seed dispersal
 - C fertilization
 - D pollination
- 12 What is the function of iron in the human body?
- A formation of new cells
 - B formation of haemoglobin
 - C formation of strong bones
 - D formation of white blood cells

- 13 Which environmental change increases the rate of transpiration?
- A decrease in humidity
 - B decrease in temperature
 - C decrease in light intensity
 - D decrease in wind movements
- 14 A burning candle is put in a closed bottle. After a few minutes it stops burning. Why did the candle stop burning?
- A the temperature has increased inside the bottle
 - B carbon dioxide has been used up in the bottle
 - C oxygen has been used up in the bottle
 - D there is water vapour inside the bottle
- 15 The following practices are ways of using electricity at home.
- I switching off electrical appliances when not in use.
 - II using a drier to dry clothes on a sunny day.
 - III using energy-saving light bulbs.
- Which practice conserves electricity the most?
- A I and II
 - B I and III
 - C II and III
 - D I, II and III
- 16 Fig. 16.1 shows the distillation apparatus.

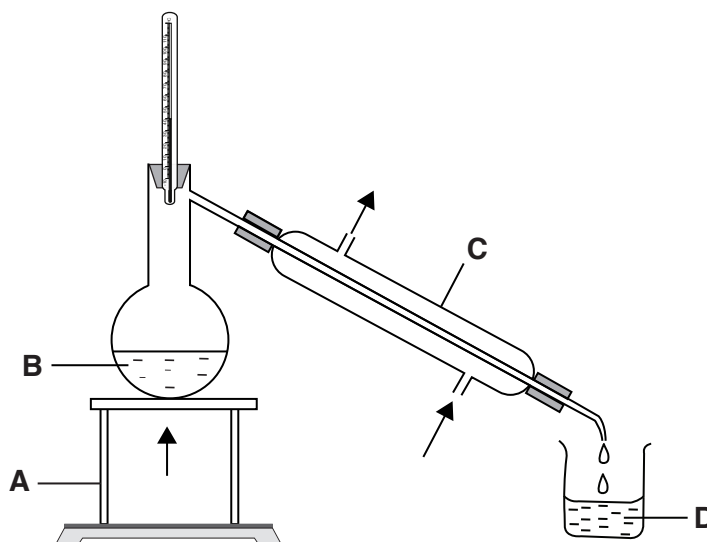


Fig. 16.1

In which part, **A**, **B**, **C** or **D** is a gas changed to a liquid?

- 17 Which physical quantity is a force?
- A density
 - B length
 - C mass
 - D weight
- 18 Which object is a natural source of light?
- A sun
 - B torch
 - C moon
 - D candle
- 19 When an astronaut goes to the moon, the following may occur:
- 1 his height changes
 - 2 his mass remains the same
 - 3 the force of gravity acting on him remains the same

Which statement correctly describes what happens to the astronaut?

- A 1 only
- B 2 only
- C 1 and 2
- D 1 and 3

Use Fig. 20.1 to answer Questions 20 and 21.

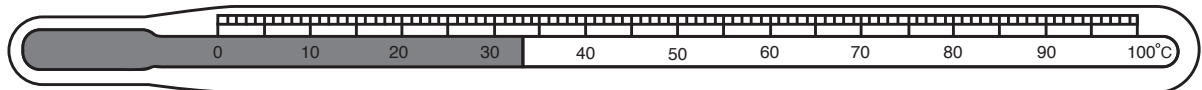


Fig. 20.1

- 20 What is the name of the instrument shown in Fig. 20.1?
- A hydrometer
 - B anemometer
 - C clinical thermometer
 - D laboratory thermometer

- 21 What is the reading on the instrument shown in Fig. 20.1?
- A 30.3 °C
 - B 30.6 °C
 - C 33.0 °C
 - D 47.0 °C
- 22 Which statement is true about the movement of the Earth around the Sun.
- A the Earth takes 1 year to orbit the Sun
 - B the Sun takes 1 year to orbit the Earth
 - C the Earth takes 24 hours to orbit the Sun
 - D the Earth spins on its axis once every year

Use Fig. 23.1 to answer Questions 23 and 24.

Fig. 23.1 shows the two main stages of making coffee using powder.

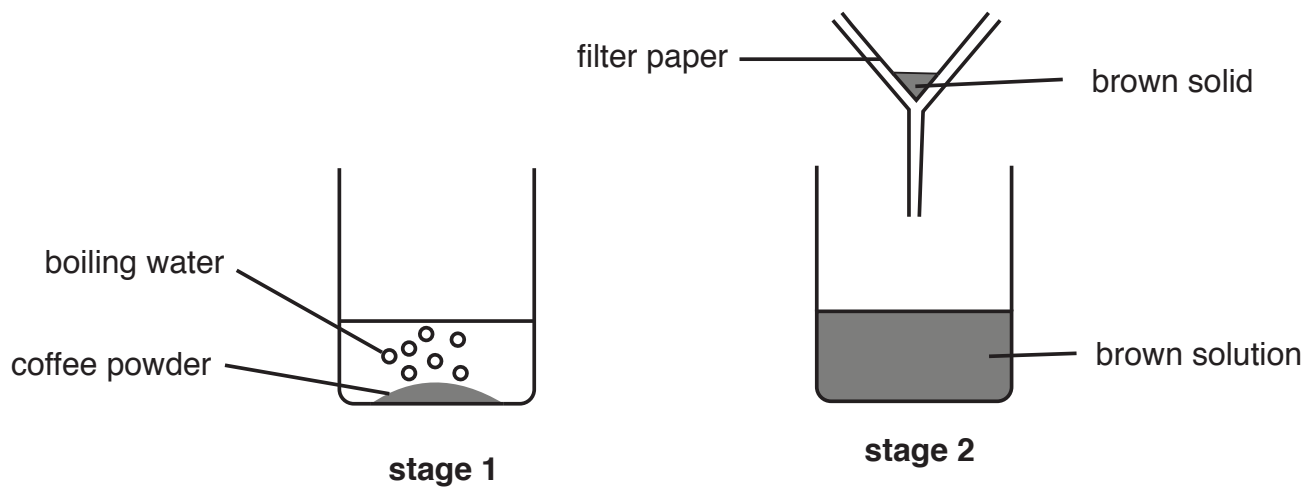


Fig. 23.1

- 23 Why does the water turn brown in **stage 2**?
- A some coffee powder dissolves in the water
 - B coffee powder has sand particles
 - C the water dissolves in the coffee powder
 - D the coffee powder evaporates
- 24 Which statement best explains why there is a brown solid on the filter paper?
- A the coffee powder has expired
 - B the coffee powder has sand particles
 - C coffee powder does not dissolve in water
 - D coffee powder dissolves to a certain limit in water

- 25 Fig. 25.1 is a circuit diagram.

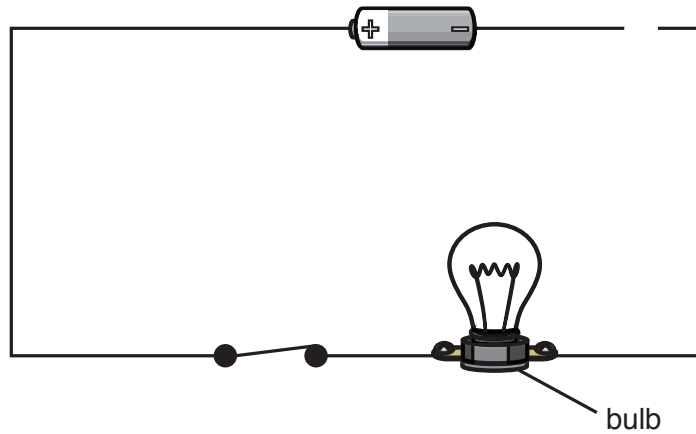


Fig. 25.1

Why will the bulb in Fig. 25.1 **not** give out light?

- A the bulb is broken.
 - B the cell is too small.
 - C the switch is closed.
 - D the circuit is not complete.
- 26 Fig. 26.1 is part of an electromagnet.

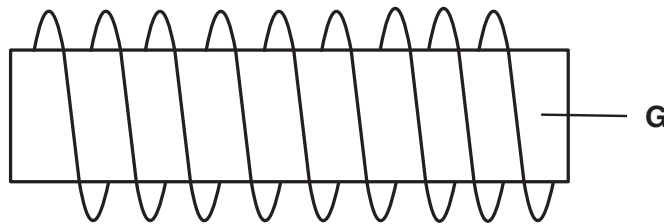


Fig. 26.1

What is the name of the part labelled **G** in Fig. 26.1?

- A magnet
- B coil
- C wire
- D core

- 27 Which action decreases the strength of an electromagnet?
- A using fewer turns in the coil
 - B using a soft iron for the core
 - C increasing the number of cells
 - D increasing the number of turns in the coil.
- 28 Which statement best describes the Solar eclipse?
- A moon passes between the Earth and Sun.
 - B Earth passes between the moon and Sun.
 - C Sun passes between the Earth and moon.
 - D Sun blocks the moon from Earth.
- 29 Which part is found in the female reproductive system?
- A bladder
 - B urethra
 - C uterus
 - D ureter
- 30 Which order of the phases of the moon is correct?
- A new moon → waxing crescent → first quarter → full moon → third quarter → waning crescent
 - B full moon → waxing crescent → waning crescent → first quarter → third quarter → new moon
 - C full moon → first quarter → waning crescent → third quarter → waxing crescent → new moon
 - D new moon → first quarter → waxing crescent → full moon → third quarter → waning crescent

31 Fig. 31.1 represents the four types of clouds.

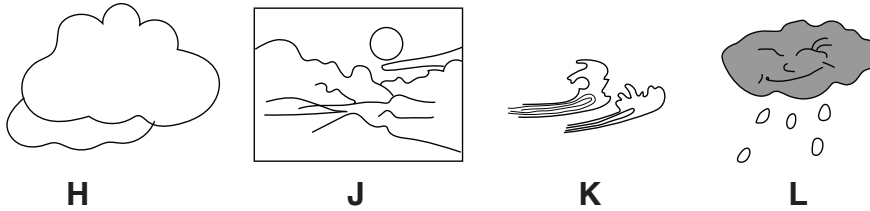


Fig. 31.1

Which row represents the correct names of the clouds in Fig. 31.1?

	H	J	K	L
A	cumulus	stratus	cirrus	nimbus
B	nimbus	cirrus	stratus	cumulus
C	nimbus	stratus	cirrus	cumulus
D	cumulus	cirrus	stratus	nimbus

32 Which technological gadget may be used for safety during school hours?

- A electric bell
- B google class
- C electric fence
- D video cameras

33 Which part of blood transports oxygen around the body?

- A plasma
- B platelets
- C red blood cells
- D white blood cells

34 Fig 34.1 is a diagram of the human heart.

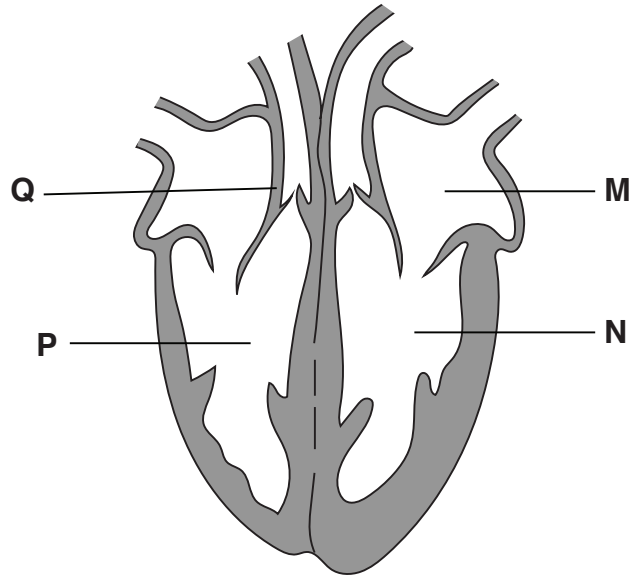


Fig. 34.1

Which row represents the correct parts of the human heart in Fig. 34.1?

	M	N	P	Q
A	left atrium	left ventricle	right atrium	right ventricle
B	left atrium	left ventricle	right ventricle	right atrium
C	right atrium	right ventricle	left ventricle	left atrium
D	right ventricle	right atrium	left atrium	right ventricle

35 Which meal may be recommended for a diabetic patient?

- A** roasted beef, brown bread, boiled cabbage, water
- B** grilled fish, baked potato, spinach, low fat milk
- C** beans, porridge, banana, coffee
- D** fried chicken, rice, soup, water

- 36 Fig. 36.1 is an instrument found in a weather station.



Fig. 36.1

What quantity is measured using the instrument in Fig. 36.1?

- A rainfall
 - B temperature
 - C wind direction
 - D wind speed
- 37 Fig. 37.1 is a diagram of a wind powered water pump.

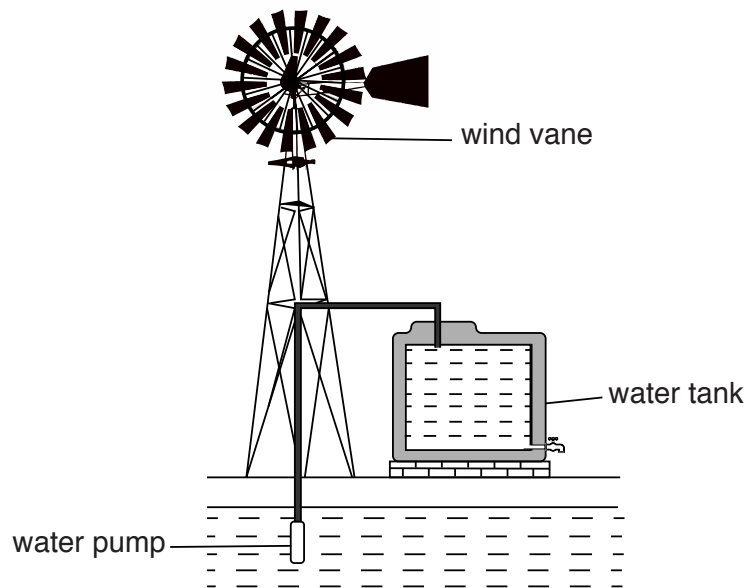


Fig. 37.1

Why is the system of pumping up water in Fig. 37.1 better than using electricity from coal?

- A less pollution
- B wind is not reliable
- C more electricity is used
- D cleaner water is collected

- 38 A person quickly removes a hand from a stove.
What stimulus is the person responding to?
- A light
 - B heat
 - C smell
 - D touch
- 39 Which conditions are necessary for seeds to germinate?
- A fertile soil, sunlight and oxygen
 - B fertile soil, oxygen and moisture
 - C suitable temperature, oxygen and moisture
 - D moisture, suitable temperature and sunlight
- 40 Fig. 40.1 shows a photograph of a lipstick fruit.



Fig. 40.1

Which method of seed dispersal occurs in the fruit in Fig. 40.1?

- A animal dispersal
- B water dispersal
- C wind dispersal
- D self-dispersal