



# THE SPECTRUM EXAMINATIONS HUB

Beginning of term two 2025

P.6 Integrated science

Time Allowed: 2 hours 15 minutes

NAME: \_\_\_\_\_ STREAM \_\_\_\_\_

SCHOOL \_\_\_\_\_

Read the following instructions carefully:

1. This paper has two sections: A and B
2. Section A has 40 questions (40 marks)
3. Section B has 15 questions (60 marks)
4. Answer all questions. All the work for both sections A and B must be shown in the spaces provided.
5. All work must be done using a blue or blackball point pen or ink. Any work done in pencil will NOT be marked except drawings and diagram.
6. Unnecessary changes in your work and handwriting that cannot be easily read may lead to loss of marks.
7. Do not fill anything in the table indicated; "For examiners' use only" and the boxes inside the question paper.

FOR EXAMINERS' USE ONLY		
Qn No.	MARK	EXR'
1 - 5		
6 - 10		
11 - 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
<b>TOTAL</b>		

**Turnover.**

## SECTION A: 40 MARKS

1- Why is clay soil the most suitable for making pots?

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2- What is meant by adhesion force?

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3- Mention any other product obtained from bees besides bee wax and honey.

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4- Which component of air is used in respiration?

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5- For what reason do plants climb others?

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6- State the importance of the equipment below.



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7- Which component of air is used in the above equipment in order for it to serve its purpose?

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8- Give one structural difference between a cock and a hen.

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9- Name the type of bees in a hive that mate with the queen bee.

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10- Which mammal uses vibration for movement?

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11- Identify any one thing we can make from sisal.

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12- Give any one economic importance of mosquitoes to people.

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13- Which element of PHC helps to control rapid population growth?

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14- How many pairs of legs has a spider?

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15- State any one danger of poor personal hygiene.

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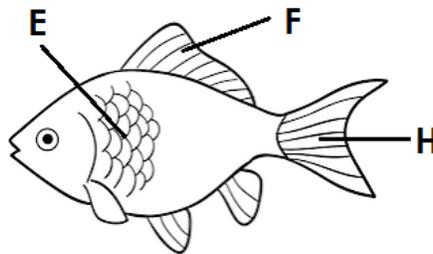
16- What are vertebrates?

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17- Mention any one animal vector in the environment.

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**Study the diagram below and use it to answer the questions that follow.**



18- Name the part labeled **F** on the above diagram.

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19- What is the importance of part marked **E** to the above organism?

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20- During the preparation of ORS, sugar and salt are dissolved together in water. State the importance of salt to the patient who takes ORS.

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- 21- By what process does the smell of onions being fried reach a neighbour who is a distance away?  
\_\_\_\_\_
- 22- In which state of matter are molecules closely packed together?  
\_\_\_\_\_
- 23- How does heat travel through a vacuum?  
\_\_\_\_\_
- 24- Write one material used to make local salt.  
\_\_\_\_\_
- 25- Identify the sensory organ that a normal person uses to feel the temperature of any object.  
\_\_\_\_\_
- 26- What is the main reason for including legumes in the crop rotation cycle?  
\_\_\_\_\_
- 27- Why do hyenas move in the same places with lions?  
\_\_\_\_\_
- 28- State the reason why electric wires are fixed loosely on the poles?  
\_\_\_\_\_
- 29- What happens to the volume of water when frozen?  
\_\_\_\_\_
- 30- Why is sugarcane not regarded as stem tuber?  
\_\_\_\_\_
- 31- State the type of fertilization that occurs in amphibians.  
\_\_\_\_\_
- 32- Why is distilled water not good for drinking?  
\_\_\_\_\_

33- How do mushrooms reproduce?

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34- State one serious reason why you wouldn't advise the person below to smoke.



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35- Give any one function of the human ear.

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36- How is the foot of a swimming bird adapted to its function?

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37- What is an extended family?

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38- Mention one enzyme that works under acidic conditions.

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39- Name the main natural source of water in the environment.

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40- Why is a snake regarded as a cold blooded mammal?

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**SECTION B: 60 MARKS**

41- (a) What is an echo?

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(b) Give any one importance of echoes to each of the following.

(i) sailors

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(ii) bats

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(c) How can echoes be controlled in music studios?

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42- (a) State any one reason why people abuse drugs.

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(b) Outline one way in which drug-addicts affect their families.

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(c) Give one example of a drug commonly abused by the youth.

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(d) What do we call a condition in which a person depends on a drug for normal body functioning?

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43- (a) Mention two examples of biological changes.

(i) \_\_\_\_\_

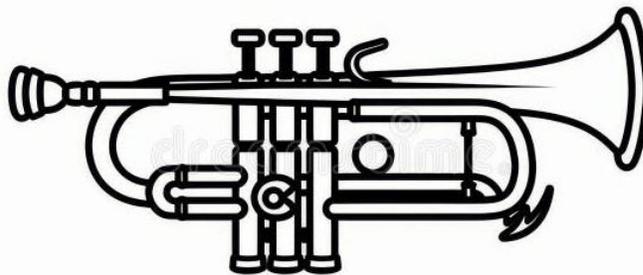
(ii) \_\_\_\_\_

(b) State two characteristics of chemical changes.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

44- **The diagram below shows a musical instrument. Use it to answer the questions that follow.**



(a) To which group of musical instruments does the one above belong?

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(b) How does the above musical instrument produce sound?

\_\_\_\_\_

(c) Mention any two ways of storing sound.

(i) \_\_\_\_\_ (ii) \_\_\_\_\_

45- (a) Mention two forms of energy produced by a burning candle.

(i) \_\_\_\_\_

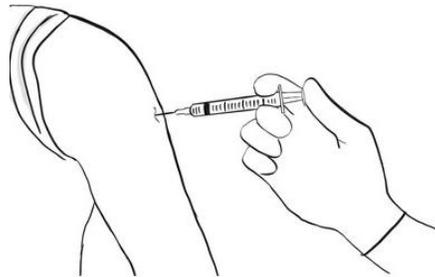
(ii) \_\_\_\_\_

(b) State two ways of putting out fire.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

46- **Study the diagram carefully and answer the questions that follow.**



(a) Which vaccine is administered at the immunization site as seen in the diagram above?

\_\_\_\_\_

(b) Mention one type of immunity.

\_\_\_\_\_

(c) Mention two diseases controlled by the pentavalent vaccine.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

47- (a) Give two disorders of the digestive system.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(b) Mention any two diseases which attack the digestive system.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

48- (a) What is breast feeding?

\_\_\_\_\_

(b) Give any two advantages of breast feeding to a baby.

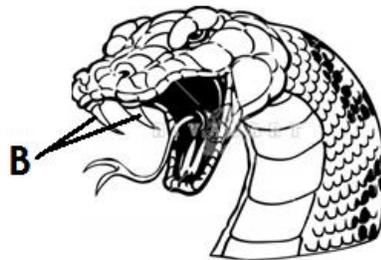
(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(c) Name one disease that is spread through breast feeding.

\_\_\_\_\_

49- **The diagram below represents a type of snake. Use it to answer the questions that follow.**



(a) Name part labeled **B** on the diagram above.

\_\_\_\_\_

(b) Of what importance is part marked **B** to the snake?

\_\_\_\_\_

(c) What type of snake is shown above?

\_\_\_\_\_

(d) State the first aid for a snake bite.

\_\_\_\_\_

50- (a) What is docking?

\_\_\_\_\_

(b) Give two advantages of docking.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(c) Name the tool used in docking.

\_\_\_\_\_

51- (a) What are vulnerable groups of people?

\_\_\_\_\_

(b) Identify two examples of vulnerable groups of people.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(c) Give one reason why elderly people and babies require frequent feeding.

\_\_\_\_\_

52- (a) What do you understand by vertebrates?

\_\_\_\_\_

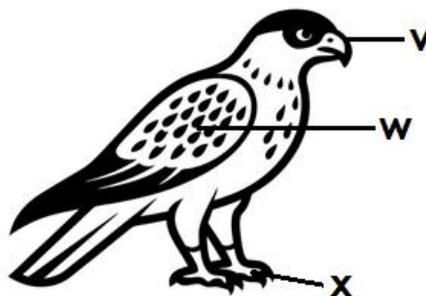
(b) Write down any one characteristic which is common to all vertebrates.

\_\_\_\_\_

(c) What type of skeleton do vertebrates have?

\_\_\_\_\_

53- **Study the diagram carefully and answer the questions that follow.**



- (a) Name the parts labeled **V** and **W**.
- (i) **V** \_\_\_\_\_ (ii) **W** \_\_\_\_\_
- (b) What kind of food is eaten by birds with a beak like the one above?
- \_\_\_\_\_
- (c) State the main importance of part marked **W** to the bird.
- \_\_\_\_\_

54- (a) Mention two examples of exotic breeds of rabbits.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(b) Mention two diseases which attack rabbits.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

55- **Match the weather instruments to their respective elements.**

A	B
Anemometer	humidity
Barometer	direction of wind
Hygrometer	speed of wind
Weather cock	air pressure

(a) anemometer \_\_\_\_\_

(b) barometer \_\_\_\_\_

(c) hygrometer \_\_\_\_\_

(d) weather cock \_\_\_\_\_

**END**