

Science and Elementary  
Technology  
**PSET**  
18/07/2023  
09: 00 AM - 11: 00 AM



Pupil's complete index number									
Province/ City	District	Sector	School	Level	Pupil	Year			
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**Pupil's names**  
Surname:.....  
Other names:.....  
**NB: PUPIL'S INDEX NUMBER AND NAMES  
MUST BE WRITTEN AS THEY APPEAR ON THE  
REGISTRATION FORM**

**PRIMARY LEAVING NATIONAL EXAMINATIONS, 2022-2023  
SCIENCE AND ELEMENTARY TECHNOLOGY**

**Duration: Two hours**

**Marks:**  **/100**

**INSTRUCTIONS**

- 1) Do not open this question paper until you are told to do so.
- 2) This paper has **one section**.
- 3) All questions are compulsory and must be answered as instructed.
- 4) Read each question carefully before answering it.
- 5) Answer the questions in the space provided in this question paper.
- 6) You must use a **blue** or **black** pen and a pencil for drawing.

Attempt ALL questions.

1) How is agriculture important to humans?

(2 marks)

Hoes, pangas  
- To get food  
- To get money

2) Write down any two ICT tools which are used in communication.

(2 marks)

- Computer

3) How are plants useful to people?

(2 marks)

Give us oxygen  
- Some are food

4) How can you maintain trees healthy?

(2 marks)

- Don't burning  
- Don't cut down trees  
- Avoid air pollution

5) Name any one tool that can be used to cut papers when making utility objects.

(1 mark)

Scissors

6) Name any two bad effects of heavy rain to the environment.

(2 marks)

- Cause floods  
- Destroy environment

7) Identify any two human activities that can lead to water pollution. (2 marks)

- Washing water with soap
- burning bushes

8) What are metals? (2 marks)

Are typically hard, shiny with good electrical and thermal conductivity.

9) Explain how chicken diseases can be prevented. (2 marks)

- To reduce the number of chicken
- To treat them regular

10) Explain the importance of adding fertilizers to soil. (3 marks)

- Give good crops (harvest)
- increasing harvest

11) Name any two ways of protecting environment from soil erosion. (2 marks)

- Dig terraces
- Plant trees
- Avoid burning

12) Name any two objects that can be made from wires. (2 marks)

- A car
- A bike

- 13) Explain why the sound from a long-distance is clearer during the night than during the day. **(2 marks)**

..... Because there are not other sounds .....

- 14) Identify any two major classes of vertebrates. **(2 marks)**

..... - mammals .....

..... - fish .....

- 15) What is the importance of rabbit keeping? **(2 marks)**

..... - Provide meat .....

..... - Provide money .....

..... - Provide manure .....

- 16) Give any one tool that is used by mechanics. **(1 mark)**

..... Smith, pliers .....

- 17) State any two ways of maintaining mechanical and blacksmith tools. **(2 marks)**

..... - To keep them in dry places .....

..... - to use oil to avoid .....

- 18) Match the simple machines below to their uses. **(4 marks)**

Machines	Uses
Needle	for transporting loads.
Fishing rod	for digging.
Wheel barrow	for knitting clothes
Hoe	for catching fish

- 19) Tom and Jane are sitting on a seesaw. If Jane who is 6 cm away from the fulcrum weighs 40 kg, find the mass of Tom who is 8 cm away from the fulcrum. (2 marks)

$$\text{The mass of Tom} = \frac{40 \text{ kg} \times 8}{6} = 53.3 \text{ kg}$$

- 20) Give any two objects which you can make out of banana fibres. (2 marks)

- A ball  
- The cord

- 21) Give the material from which each of the following objects is made. (4 marks)

Socks ..... a wire

Dolls ..... clothes

Polygons ..... A box

Toy car ..... wires

- 22) Mention any two tasks that can be performed using different computer applications. (2 marks)

photo editing, videos editing, video creation

- 23) Give any one requirement that is needed to open up an E-mail account. (1 mark)

Accept the terms of service

- 24) What is the difference between a file and a folder? (1 mark)

File  $\rightarrow$  is a folder or box for holding loose papers together and in order for easy reference.

Folder = is a folding cover typically made of stiff paper or card for storing loose paper

25) Define the following terms as they are used in scratch activity: (2 marks)

a) Sprite.....

b) Animation. *A combination of live action*

26) What advice would you give to people who use fossil fuel as a source of energy? (2 marks)

*- To put it far the fire*

*\* .....*

27) State any one danger of polluted air. (1 mark)

*Can cause diseases*

28) What is another name for biodegradable waste? (1 mark)

*degradable, non-toxic*

29) Apart from vaccinating goats and cattle, name other two ways of preventing diseases. (2 marks)

*- To reduce the number of them*

*- To keep them in <sup>big</sup> large spaces*

30) Explain the importance of keeping sanitation in an animal farm. (2 marks)

*- To avoid some diseases*

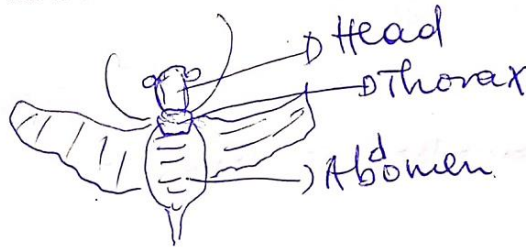
*\* .....*

31) Define the term incubation. (1 mark)

*the process or period of time in which harmful bacteria or viruses increase in size or number in person's body*

32) Draw and label an insect with its 3 major parts.

(3 marks)



33) What type of first aid that should be given in case of muscle cramp attack?

(2 marks)

- To do physical exercise  
 - To

34) Organize the following crops into legumes, root tubers, vegetables and fruits.

(4 marks)

Beans, Cassava, mango, Cabbage, Soya beans, Carrot, Apple, spinach.

Legumes	Root tubers	vegetables	Fruits
	Cassava	Carrot	mango
			Apple

35) Distinguish between balanced diet and carbohydrates.

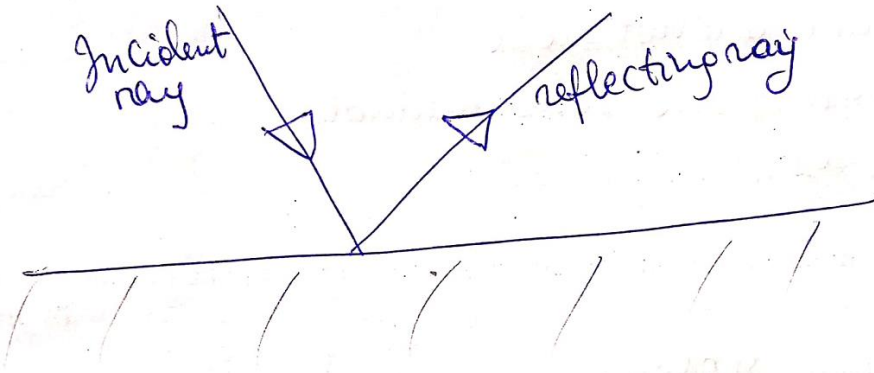
(2 marks)

balanced diet is food which has energy food.  
 protecting food, building food

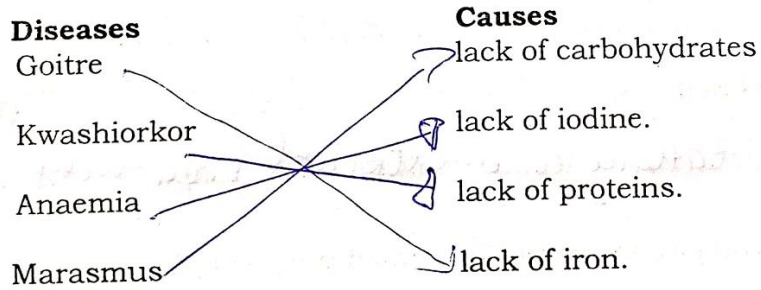
36) Outline any two examples of digestive glands. (2 marks)

- liver  
- pancreas

37) Draw a diagram to show an incident ray reflecting after falling on a plane mirror. (3 marks)



38) Match the following deficiency diseases to their causes. (4 marks)



39) Outline the elements of a balanced diet. (2 marks)

- Energy food  
- protecting food  
- building food



40) Complete the following with a correct digestive juice secreted by each body organ. **(2 marks)**

a) The liver:..... *Bile* .....

b) Pancreas:..... *pancreatic enzymes* .....

41) Develop any two ways that can be applied to prepare organic manure. **(2 marks)**

- *To have a ~~wal~~ hole* .....

- *manure from cows (animals)* .....

- *grasses* .....

42) Identify the mode of asexual reproduction that can be applied in the crops below. **(2 marks)**

a) Straw berry..... *Stolons* .....

b) Cassava..... *fragment or cuttings of the plant* .....

43) How do we call the liquid part of blood? **(1 mark)**

..... *It's called plasma* .....

44) Name one type of breathing. **(1 mark)**

..... *Internal breathing and external breathing* .....

45) What advice can you give to prevent unwanted pregnancy? **(2 marks)**

..... *- To use abstinence* .....

..... *- to use pills* .....

46) What is reproduction? (1 mark)

Is union of male and female cells.

47) Give any two ways of maintaining respiratory system. (2 marks)

Don't smoking  
To do physical exercise

48) Name one state of matter. (1 mark)

Liquid

49) Name any two objects at home which need magnets to function. (2 marks)

- To get small objects lost  
- Fridge  
- some doors

50) Differentiate between renewable energy and non-renewable energy. (2 marks)

- renewable energy: is energy from naturally  
- non-renewable energy: is the total consumption of fossil fuels as feedstock in the chemical industry

**END**