Science and Elementary
Technology

PSET

18/07/2023   09:00 –11:00 AM

NESA | NATIONAL EXAMINATION AND SCHOOL INSPECTION AUTHORITY

PRIMARY LEAVING NATIONAL EXAMINATIONS, 2022-2023

SCIENCE AND ELEMENTARY TECHNOLOGY

DURATION: Two hours

Marks: | /100

INSTRUCTIONS:

1) Do not open this 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.

SECTION A: ATTEMPT ALL QUESTIONS (50 MARKS)

1) How is agriculture important to humans?   **(2 marks)**

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

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3) How are plants useful to people?   **(2 marks)**

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4) How can you maintain trees healthy?   **(2 marks)**

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

   objects.   **(1 mark)**

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6) Name any two bad effects of heavy rain to the environment.   **(2 marks)**

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

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8) What are metals?   **(2 marks)**

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

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10)   Explain the importance of adding fertilizers to soil.   **(2 marks)**

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

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

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

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

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

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

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17) State any two ways of maintaining mechanical and blacksmith tools.

(2 marks)

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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 6cm away from the fulcrum weighs 40kg, find the mass of Tom who is 8cm away from the fulcrum. **(2 marks)**

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

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

Socks ....

Dolls ....

Polygons ....

Toy car ....

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

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23) Give any one requirement that is needed to open an E-mail account?

(1 mark)

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

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

a) Sprite: ....

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b) Animation: ....

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26) What advice would you give to people who use fossil fuel as a source of

energy?   **(2 marks)**

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

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

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29) Apart from vaccinating goats and cattle, name other two ways of preventing

diseases.   **(2 marks)**

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

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31) Define the term incubation.   **(1 mark)**

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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?

(3 marks)

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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

35) Distinguish between balanced diet and carbohydrates. **(2 marks)**

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

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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)**

Diseases	Causes
Goitre	lack of carbohydrates
Kwashiorkor	lack of iodine
Anaemia	lack of proteins
Marasmus	lack of iron

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

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

a) The liver: ....

b) Pancreas: ....

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

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

a) Strawberry: ....

b) Cassava: ....

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

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

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

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46) What is reproduction? **(1 mark)**

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

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

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

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50) Differentiate between renewable energy and non-renewable energy.

(2 marks)

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