

**Elementary Science and
Technology**
PEST
28 Oct. 2009 9.00 am - 11.00 am

RWANDA NATIONAL EXAMINATIONS COUNCIL



P.O.Box 3817 KIGALI-TEL/FAX : 586871

Pupil's complete index number

<i>Province/City</i>	<i>District</i>	<i>Sector</i>	<i>School</i>	<i>Pupil</i>
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PRIMARY LEAVING NATIONAL EXAMINATION

October 2009

ELEMENTARY SCIENCE AND TECHNOLOGY

Time: Two hours

Marks: /100

Instructions

- Write your index number in full as written on your registration form.
- All questions are compulsory.
- Read each question carefully before answering it.
- Do not make unnecessary changes.

SECTION A (50 marks)

1. Why is rain water good for our environment? Give two reasons.
(a)..... (1 mark)
(b)..... (1 mark)
2. Write two reasons why rain water is bad for our environment.
(a)..... (1 mark)
(b) (1 mark)
3. Is the moon a natural source of light? Explain your answer. (4 marks)
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4. Why is a hoe made of a metal?
..... (2 marks)
5. Write two reasons why a saucepan is made of a metal.
(a)..... (1 mark)
(b)..... (1 mark)
6. What causes water to change from a liquid state to a gas?
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..... (2 marks)
7. What is the name of water in a solid state? (1 mark)
8. What is meant by the term mass of a body ?
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..... (2 marks)
9. What is the unit of mass? (1 mark)
10. Why does relative density have no unit?
..... (2 marks)

11. Explain why a stone sinks into water while a dry wood floats on water.

(4 marks)

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12. Why are tea cups made of poor conductors of heat?

(2 marks)

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13. Draw a simple electric circuit which has a torch cell, a switch and a bulb.

(3 marks)

14. It is not good to touch electric switch when the fingers are wet?

Why?

(2 marks)

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15. Read the statements below and write TRUE for a correct statement and FALSE for a wrong statement.

- (a) Sound does not travel through solids. **(1 mark)**
(b) Sound travels through a vacuum. **(1 mark)**
(c) Echoes are caused by refraction of sound. **(1 mark)**

16. Name any two simple machines used by a tailor. **(1 mark)**
(a)..... **(1 mark)**
(b)..... **(1 mark)**
17. Write any two properties of a magnet. **(1 mark)**
(a)..... **(1 mark)**
(b)..... **(1 mark)**
18. State two reasons why oxygen is important. **(1 mark)**
(a).....
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..... **(1 mark)**
(b).....
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..... **(1 mark)**
19. Draw a labelled diagram showing how a ray of light is reflected by a plane mirror. On your diagram name angle of incidence and angle of reflection. **(5 marks)**
20. Why does a ray of light coming from the air bend as it enters the surface of the water? **(2 marks)**
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21. It is not good to wear thick black clothes on a hot day. Why? (3 marks)

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SECTION B (50 marks)

From number 22 to 25 answer True or False.

22. Proteins are for growth and repair; they should therefore be given to children. (1 mark)

23. Glucose is used to provide energy during exercise; it should not be given to young children. (1 mark)

24. The circulatory system consists of the heart and blood vessels. (1 mark)

25. HIV can be transmitted through blood when people share syringes and other stained instruments. (1 mark)

26. Give at least two examples of omnivorous animal. (2 marks)

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27. Give one example of carnivorous animal..... (1 mark)

28. Name one domestic animal you are familiar with..... (1 mark)

29. Name the long tube through which our food passes as it is being digested. (1 mark)

30. The organ responsible for pumping blood in the human body is (1mark)

31. Name at least two excretory organs in animals. (2 marks)

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32. What causes beriberi in most children? (1 mark)

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33. Cutting is a method used in planting some plant items. Give two examples of such plants. (2 marks)

34. Goiter is a disease which is characterized by the swelling of the thyroid gland. What causes it? (1 mark)

35. How can goiter be prevented? (2 marks)

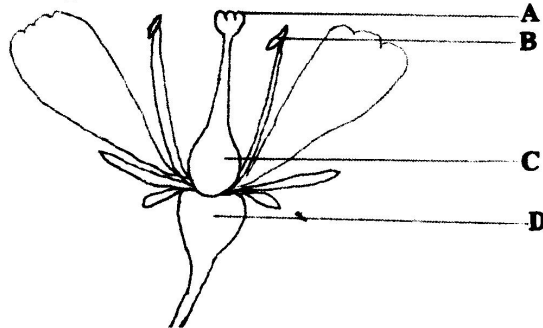
36. Each part of a plant has a particular function.

What are functions of:

(3 marks)

- (a) flowers
- (b) leaves
- (c) fruits

37. (a) Name the parts of flower labelled A, B, C and D. (4 marks)



A is..... B is..... C is..... D is.....

(b) What is the function of A, B and of C?

(3 marks)

38. What are sexual cells in a human being?

(2 marks)

39. What happens after fertilization in plants? **(2 marks)**

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40. Fish is adapted to swimming. What features enable it to swim? **(2 marks)**

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41. What features of a bird enable it to fly? **(2 marks)**

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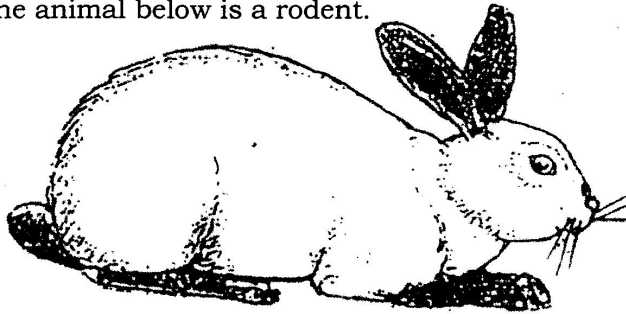
42. What is kwashiorkor? **(1 mark)**

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43. What are symptoms of kwashiorkor? **(2 marks)**

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44. The animal below is a rodent.



What do rodents feed on? **(2 marks)**

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45. What are characteristics of rodents? **(2 marks)**

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46. What is forest conservation? **(1 mark)**

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47. Give at least three reasons why we should conserve our natural forests. **(3 marks)**

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48. What is pollution? **(1 mark)**

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49. Give two reasons why it is dangerous to use polluted water. **(2 marks)**

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50. Why is it necessary to wash our hands before we eat? **(1 mark)**

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