

**Science and Elementary
Technology**

PSET

04 / 11 / 2015 09: 00-11: 00 AM



Pupil's complete index number

Province/City District Sector School Pupil

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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, 2015

SCIENCE AND ELEMENTARY TECHNOLOGY

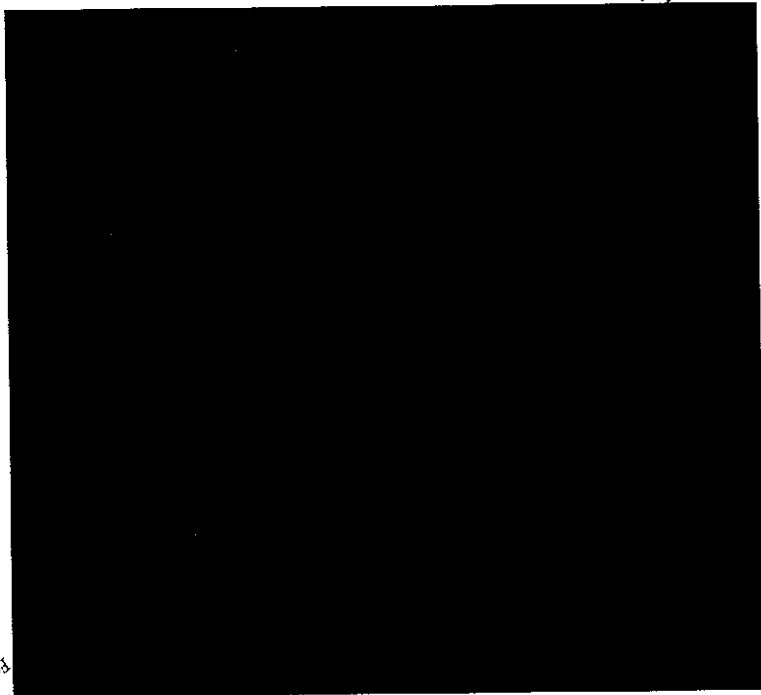
Duration : Two hours

Marks :

/100

INSTRUCTIONS

- 1) Do not open this question paper until you are told to do so.
- 2) ***This paper consists of 37 questions written on 12 pages. Before starting, verify if all pages and all questions are there and are arranged in ascending order.***
- 3) This paper has **two sections: A and B.**
- 4) Questions in both sections are compulsory and must be answered as instructed.
- 5) Read each question carefully before answering it.
- 6) Answer the questions in the space provided on this question paper.
- 7) You must use a blue or black pen and a pencil for drawing.



SECTION A: ANSWER ALL QUESTIONS.**(50MARKS)**

- 1) Name any one (a) carpentry tool **(1mark)**
(b) Agricultural tool **(1mark)**

- 2) (a) Mention one danger of stagnant water. **(1mark)**

.....
.....

- (b) What is the use of terraces? **(1mark)**

.....
.....

- 3) (a) What is a simple machine? **(1mark)**

.....
.....

- (b) Name one type of a simple machine.

..... **(1mark)**

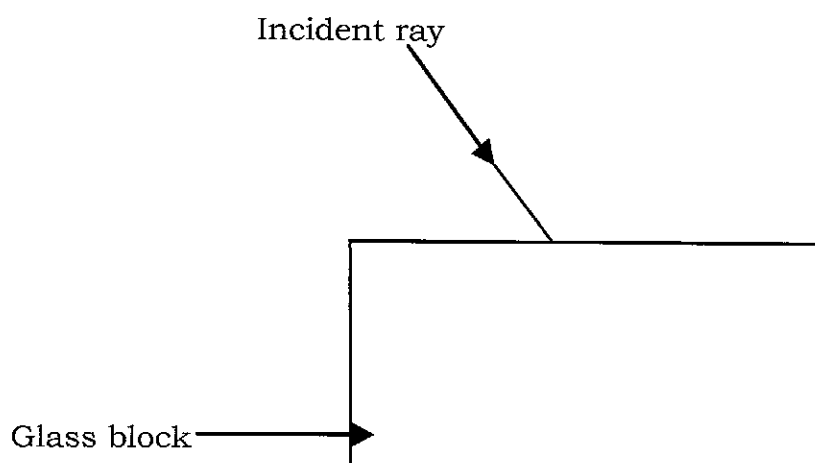
- 4) (a) Give one source of artificial light

..... **(1mark)**

- (b) Which type of surface reflects light? **(1mark)**

.....
.....

- 5) The diagram below shows a ray of light travelling from air through a glass prism.



Complete the path of the light through the glass block.

(2marks)

6) When is the solar eclipse formed? (2marks)

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.....

7) Give two types of substances that burn. (2marks)

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8) (a) Which form of energy helps us to see objects? (1mark)

(b) A force of 50N pulls a box 3m in the direction of the force.
Calculate the work done. (1mark)

.....

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9) Water can exist in three states. At room temperature water is in a liquid state. Write two other states of water. (2marks)

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.....

10) Explain how water at room temperature changes to ice. (2marks)

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11) The mass of a body is 60g and its volume is 15cm³. Calculate the density of the body. (2marks)

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.....

.....

12) The table below shows densities of some materials.

Material	Densities kg/m ³
Copper	8,900
Water	1,000
White spirit	850

(a) Which material sinks into water?
.....(1mark)

(b) Which material does not sink into water?
.....(1mark)

13) Name any two sources of electricity used to operate radios in Rwanda. (2marks)

.....
.....

14) Name any two materials used to distribute electricity from hydro power stations to homes, industries, schools and shops. (2marks)

.....
.....

15) Mention any two electrical machines used in homes. (2marks)

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.....
.....

16) If a person touches a bare wire carrying electricity in a house, what is the quickest way to save this person? (2marks)

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.....
.....

17) Give one way of producing sound. (2marks)

.....
.....
.....

18) Give two ways of storing sound. **(2marks)**

(a)

(b)

19) Why is distant sound heard clearly at night than during the day? **(2marks)**

.....

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.....

20) By which method does heat from the sun reach the earth? **(2marks)**

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21) Why do people wear sweaters on a cold day? **(2marks)**

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22) Why are saucepans good for cooking food? **(2marks)**

.....

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23) Complete the following sentence:

Like poles of a magnet **(1mark)**

and unlike poles of a magnet **(1mark)**

24) Fill in the missing words in the following sentence:

When a bar magnet is freely suspended in the air, it always faces

in direction . **(2marks)**

25) Write one use of a magnet. **(2marks)**

.....

.....

.....

SECTION B: ANSWER ALL QUESTIONS. (50 MARKS)

26) Name at least two diseases associated with water pollution.

(a) (1mark)

(b) (1mark)

27) (a) What do the words HIV and AIDS stand for?

HIV: (1mark)

AIDS: (1mark)

(b) How can we avoid contracting HIV and AIDS? (3marks)

.....

.....

.....

28) Write down any three methods of purifying water.

(a) (1mark)

(b) (1mark)

(c) (1mark)

29) Some bones on a human being are longer than others.

Give three examples of such long bones.

(a) (1mark)

(b) (1mark)

(c) (1mark)

30) (a) Give three reasons to explain why food should be cooked.

(i) (1mark)

(ii) (1mark)

(iii) (1mark)

(b) What are final products of digestion of the following food substances?

(i) Starch: (1mark)

- (ii) Protein: (1mark)
- (iii) Fats: (1mark)

31) (a) What are fertilizers?

(1mark)

.....

.....

.....

(b) Give the main types of fertilizers.

(2marks)

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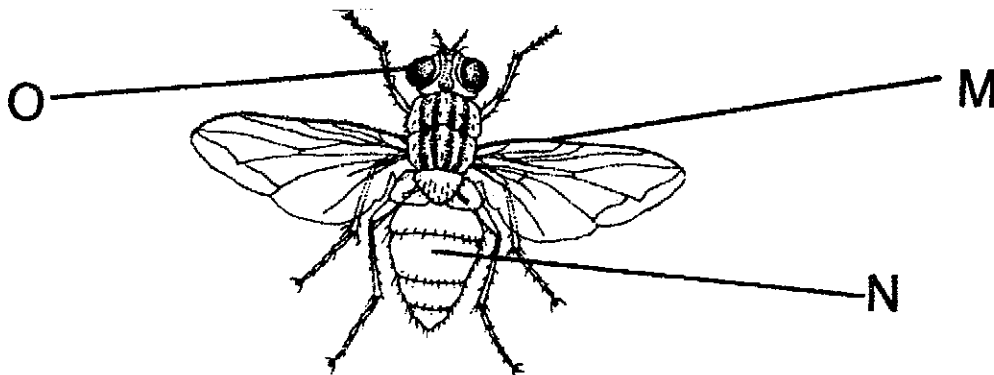
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32) Using an arrow, match items in group A with those of B in the table below.

(5marks)

A	B
Heart	Sensory organ
Kidney	Memory
Skin	Carbon dioxide
Lungs	Circulation of blood
Brain	Urine

33) Study the housefly below and answer the questions that follow.



(a) How many body parts does this insect have?

..... (1mark)

(b) Name the parts marked:

M: (1mark)

N: (1mark)

(c) What is the use of the part marked O to the housefly?

..... (1mark)

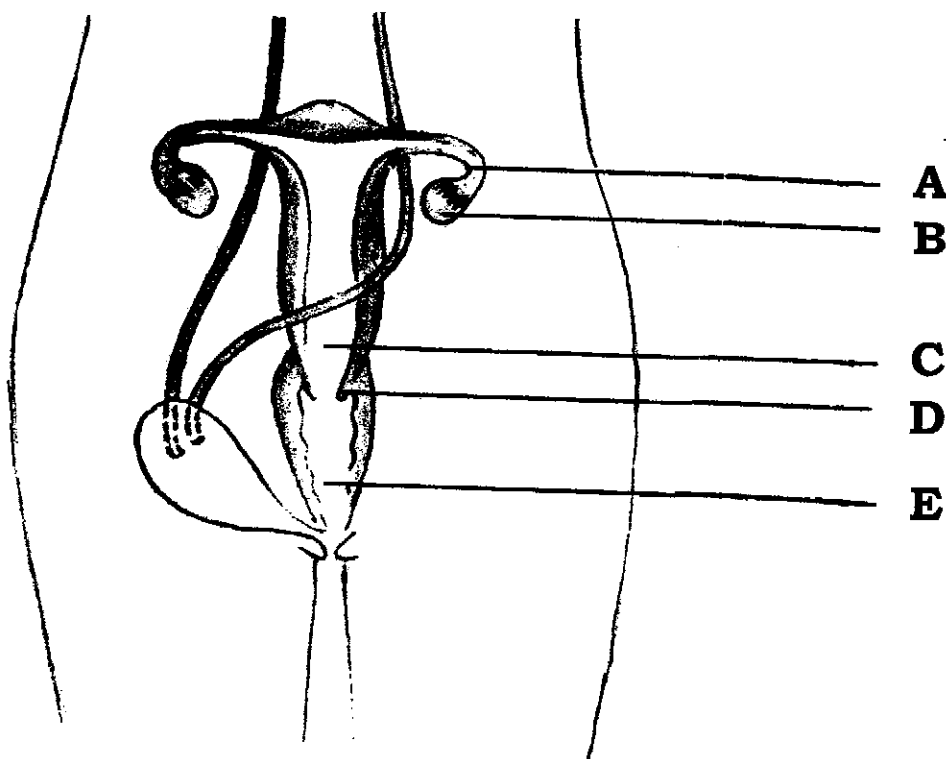
(d) Where does a housefly lay its eggs?

..... (1mark)

(e) How is this housefly dangerous to us?

.....
..... (1mark)

34) The diagram below shows the female reproductive system.



Name the parts marked A, B, C, D, and E.

A: (1mark)

B: (1mark)

C: (1mark)

D: (1mark)

E: (1mark)

35) The walls of the stomach produce chemical substances called gastric juice and hydrochloric acid. What is the use (function) of:

- (a) Gastric juice?
.....
..... **(2marks)**
- (b) Hydrochloric acid?
.....
..... **(1mark)**

36) (a) Name two things involved in sanitation or hygiene.

- (i) **(1mark)**
- (ii) **(1mark)**

(b) Latrines should be constructed at least ten metres from the living house. Give two reasons for this.

- (i) **(1mark)**
- (ii) **(1mark)**

37) (a) In the spaces below draw an example of:

- (i) A simple leaf **(1mark)**

(ii) compound leaf.

(1mark)

(b) (i) State any two uses of leaves to plants.

(2marks)

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.....

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(ii) State any one use of leaves to us.

(1mark)

.....

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