



THE REPUBLIC OF UGANDA
LYANTONDE DISTRICT ACADEMIC BOARD
MOCK 2024

INTEGRATED SCIENCE

Time allowed: 2 hours 15 minutes

Index No.

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| School EMIS | | | | | | Personal No. | | |
|-------------|--|--|--|--|--|--------------|--|--|
| | | | | | | | | |

Candidate's Name

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Candidate's Signature

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School Name

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District Name

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Read the following instructions carefully:

**FOR EXAMINER'S USE
ONLY**

1. The 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 answers to both
Sections **A** and **B** must be written in the spaces provided.
5. All answers must be written using a blue or black ball
point pen or ink. Diagrams should be drawn in pencil.
6. Unnecessary crossing of work may lead to loss of marks.
7. Any handwriting that cannot be easily read may lead to
loss of marks.
8. Do **not** fill anything in the boxes indicated;
For Examiner's use only.

| Qn. No | MARK | SIGN |
|---------|------|------|
| 1 – 10 | | |
| 11 – 20 | | |
| 21 – 30 | | |
| 31 – 40 | | |
| 41 – 43 | | |
| 44 – 46 | | |
| 47 – 49 | | |
| 50 – 52 | | |
| 53 – 55 | | |
| TOTAL | | |

SECTION A: 40 MARKS

Questions **1** to **40** carry one mark each

1. Which property of sound forms an echo?

.....

2. How do some people become passive smokers?

.....

3. Why is the squat hole of a Ventilated Improved Pit latrine left without a cover?

.....

4. Give the meaning of drug abuse.

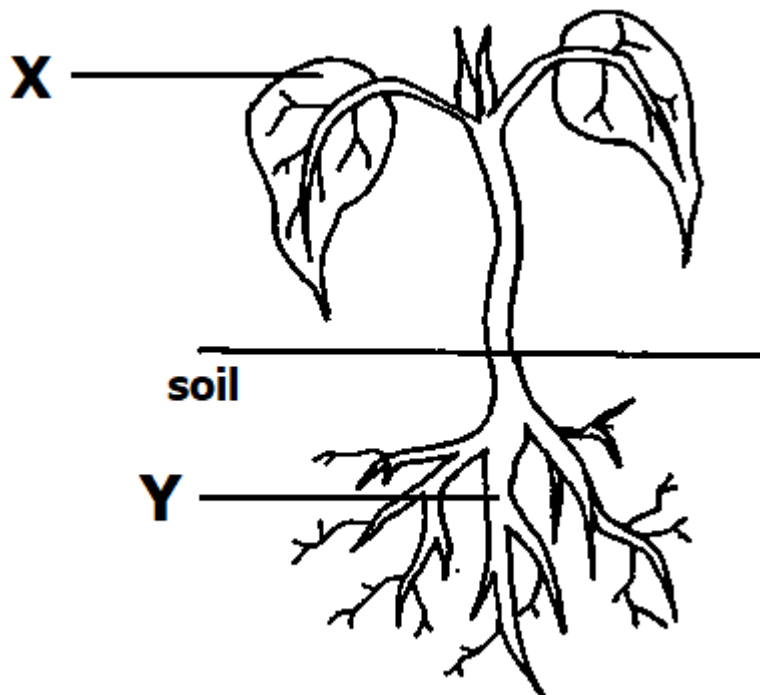
.....

.....

5. How does a snail protect itself from enemies?

.....

The diagram below shows a flowering plant. Use to answer questions **6** and **7**.



6. Apart from making food, mention **one** other process that takes place in part **X**.

.....

7. State any **one** function of part **Y** to the plant.

.....

8. Give any **one** reason why plants are grouped under living things.

.....

9. State **one** way in which the breathing of a housefly is different from that of a rat.

10. Why is a wet warm cloth put on a body of a person with fever?

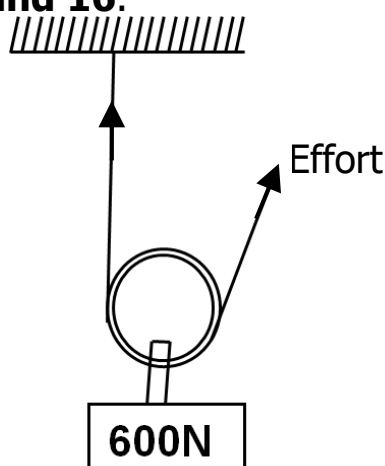
11. State the cause of kwashiorkor among children.

12. Suggest **one** way of demagnetising a magnet.

13. Apart from helping enzymes to function well, give **one** other importance of hydrochloric acid.

14. How are tall buildings protected against danger due to lightning?

The diagram below shows a pulley system. Use it to answer questions 15 and 16.



15. Name the pulley system.

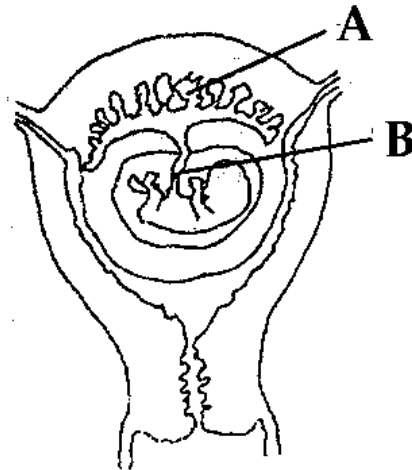
16. Given that the mechanical advantage of the pulley above is 2. Calculate the effort used to lift the load using the above machine.

17. How do the double silvered walls in a thermos flask help prevent heat from being lost through the vacuum?

18. How are insect pollinators attracted to flowers at night?

19. In which way are chemical changes similar to biological changes?

The diagram below shows a foetus in the womb. Use it to answer questions **20** and **21**.



20. Name the part marked with letter **A**.

21. State any **one** way in which the part marked with letter **B** is useful to the foetus.

22. State any **one** disadvantage of using traditional drugs.

23. Give any **one** body characteristic that is common to a spider and a tick.

24. Name **one** disease that affects the stomach because of alcoholism.

25. Which blood cells carry oxygen in the body?

26. Name any **one** other vertebrate that can be classified with a frog.

27. Give the importance of sorting in cleaning clothes at home.

28. How is chlorophyll important during the process of photosynthesis?

29. What is near drowning?

.....

.....

30. Suggest **one** reason why blood goes to the lungs first before it circulates to all the parts of the body.

.....

31. Mention **one** cause of leaching.

.....

32. Which method of making alcohol involves both evaporation and condensation?

.....

33. State any **one** way in which bacteria are useful to people.

.....

34. Name the instrument used for measuring the highest and lowest temperatures of the day.

.....

35. Why is it important for a patient to use all drugs prescribed by the doctors?

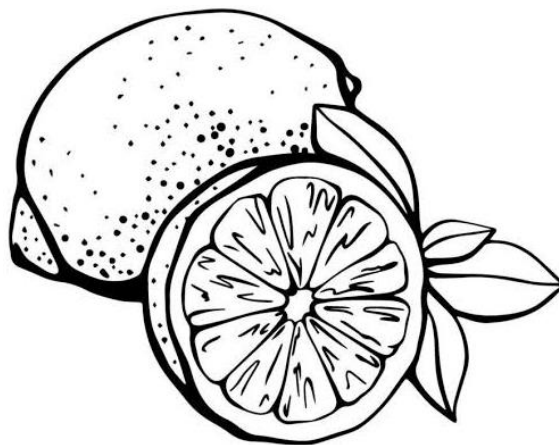
.....

36. State the difference between the pulmonary artery and the rest of the other arteries

.....

.....

The diagram below shows a succulent fruit. Use it to answer questions **37** and **38**.



37. By what method can the above fruit be dispersed?

.....

38. State **one** way how the fruit above is adapted to the method of dispersal mentioned in question **37** above.

.....

39. Apart from adding fertilizers, state any **one** other way nitrogen is added into the soil.

.....

40. State the importance of water that is found in the toilet bowl.

.....

SECTION B: 60 MARKS

*Questions **41** to **55** carry four marks*

41. The table below shows deficiency diseases and their signs but in wrong order. Re-write them by matching correctly.

| A: Deficiency disease | B: Sign |
|---|---|
| a) Kwashiorkor b) Scurvy c) Rickets d) Anaemia | <ul style="list-style-type: none"> - Pale skin - Swollen moon face - Always hungry - Bleeding gums in the mouth - Weak and bow shaped bones. |

- a) Kwashiorkor
- b) Scurvy
- c) Rickets
- d) Anaemia

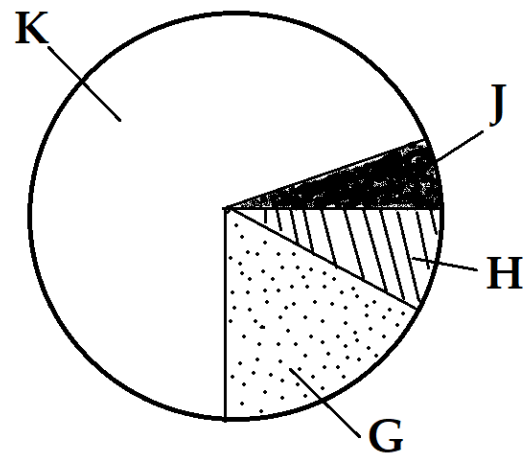
42. (a) Mention any **two** processes by which soil is formed.

- i)
- ii)

(b) Identify any **two** farming methods that are destructive to the soil.

- i)
- ii)

43. The pie chart below shows proportions of **G**, **H**, **J** and **K** that represent the composition of air. Study it carefully and answer the questions that follow.



- (a) Name the gas represented by **K**.
.....
- (b) State the percentage of the gas represented by **J** in the atmosphere.
.....
- (c) Which proportion represents the gas used in fire extinguishers?
.....
- (d) State any **one** function of the gas represented by **G**.
.....

44. The table below shows different groups of animals. Study it carefully and answer the questions that follow.

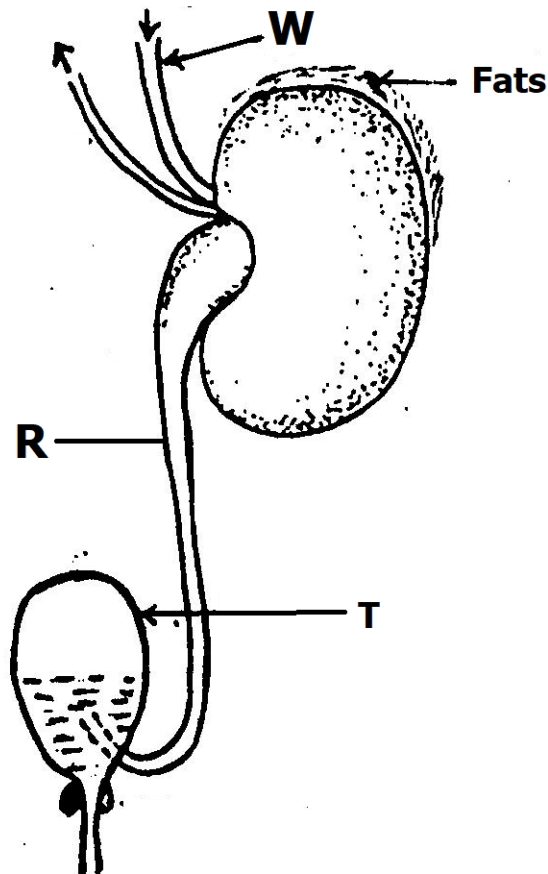
| K | X | F |
|----------|----------|------------|
| Duck | Bat | Frog |
| Eagle | Sheep | Salamander |
| Ostrich | Rabbit | Newt |

- a) Give **one** general name for animals in group **F**.
.....
- b) How are animals in group **K** similar to those in group **X**?
.....

c) Why is a bat regarded as a mammal and not a bird?

d) State **one** characteristic of animals in group **X** that is not in other groups.

45. The diagram bellows shows a certain body system. Use it to answer the questions that follow.



a) Name the parts marked:

- i) **W**
- ii) **R**

b) State **one** function of the part labelled **T**.

c) Mention any **one** waste product excreted by the kidney.

46. (a) State the type of germination where cotyledons come out of the ground.

(b) State the function of water during germination of seeds.

.....
(c) Name any **one** crop that undergoes the type of germination mentioned in (a) above.

.....
(d) State the reason why cotyledons turn green after germination in the crop mentioned in (c) above.

.....
47. (a) State the use of each of the following tissues within the human body.

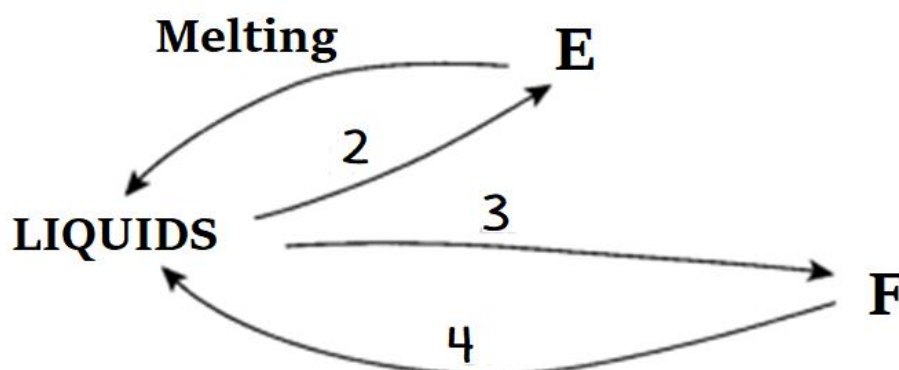
i) tendon

.....
ii) ligament

.....
(b) How is the synovial fluid similar to cartilage in terms of functions at a joint?

.....
(c) State **one** way in which joints are important in the human body.

.....
48. The diagram below represents the physical processes **2**, **3** and **4** that are involved in change of states of matter. Study it carefully and answer the questions that follow.



(a) Identify the state of matter marked **F**.

(b) Name the processes **3** and **4**.

3

4

(c) State any **one** effect of heat on metals.

.....

49. (a) What substance in plants helps them to make their own food?

.....

(b) How is the feeding in ferns different from that of mushrooms?

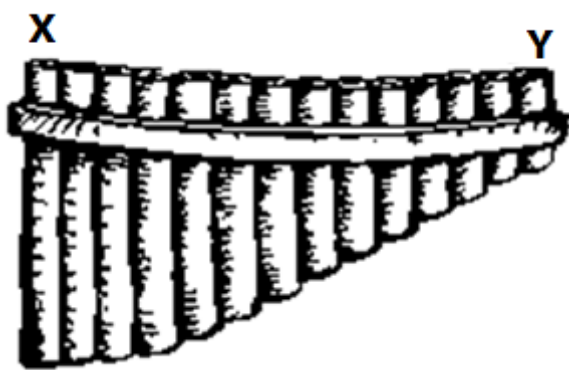
.....

(c) Apart from ferns, give any **two** other plants which are similar to mushrooms in their way of reproduction.

(i)

(ii).....

50. **The diagram below shows a musical instrument. Use it to answer the following questions**



a) Which of the pipes **X** and **Y** will produce the lower sound?

.....

b) Give a reason for your answer in (a) above.

.....

c) Give **one** factor which affects pitch produced by the instrument above.

.....

d) Why are the pipes in the instrument above made having different heights?

.....

51. (a) Give one reason why drugs should be kept;

(i) away from moisture and sunlight

(ii) out of reach of children

(b) State any **two** ways in which people in a family can misuse drugs.

(i)

(ii)

52. (a) State any **two** effects of cannibalism in poultry.

i)

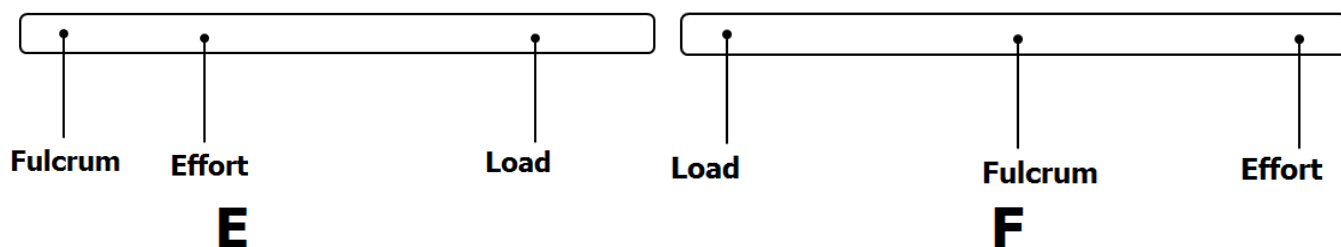
ii)

(b) State any **two** ways cannibalism can be controlled on a poultry farm.

i)

ii)

53. The diagrams below represent two levers **E** and **F** with different positions of load, effort and fulcrum.



a) Which class of levers is represented by diagram **F**?

b) Give any **two** examples of simple machines represented in **E**.

i)

ii)

c) State **one** advantage of using the class of levers in **F**.

54. (a) What's the quantity of each of the following components of ORS when using one litre of safe water;

i) Salt

ii) Sugar

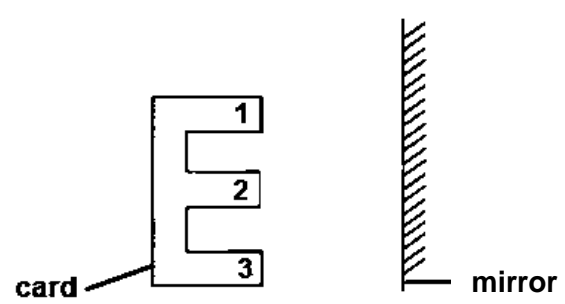
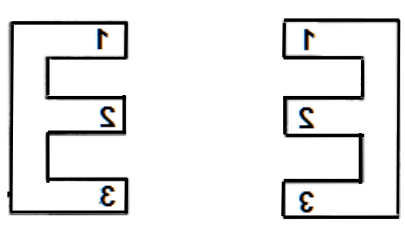
(b) Why should water used for preparing ORS be boiled?

.....

(c) Apart from ORS, how else can a dehydration victim be helped?

.....

55. A card made in the shape of letter **E** and numbers **1**, **2** and **3** written on it was placed in front of a mirror as shown in the diagram below.

| Object | Images |
|--|---|
|  |  <p style="text-align: center;">B C</p> |

a) Which of the images **B** and **C** correctly represents the image as seen in the mirror?

.....

b) State any **two** observable characteristics of the image in mentioned in (a) above.

i)

ii)

c) Mention any **one** effect of increasing the distance between the object and a pin-hole camera.

.....

END