



THE REPUBLIC OF UGANDA

LYANTONDE DISTRICT ACADEMIC BOARD

MOCK 2023

INTEGRATED SCIENCE

Time allowed: 2 hours 15 minutes

Index No.

School EMIS					Personal No.		

Candidate's Name :

Candidate's Signature :

School Name :

District Name :

Read the following instructions carefully:

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.

**FOR EXAMINER'S USE
ONLY**

Qn. No	MARK	SIGN
1 – 20		
21 – 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. Give any **one** example of a conductor of heat.

2. Name the component of air which bubbles out when the bottle of soda is opened.

3. Name the injury you get when you get in contact with red hot charcoal.

4. How are splints important when giving first aid to a person with a fracture?

5. To which class of levers do you classify the simple machine shown below?



6. Write down any **one** raw material used in fermentation process of making alcohol.

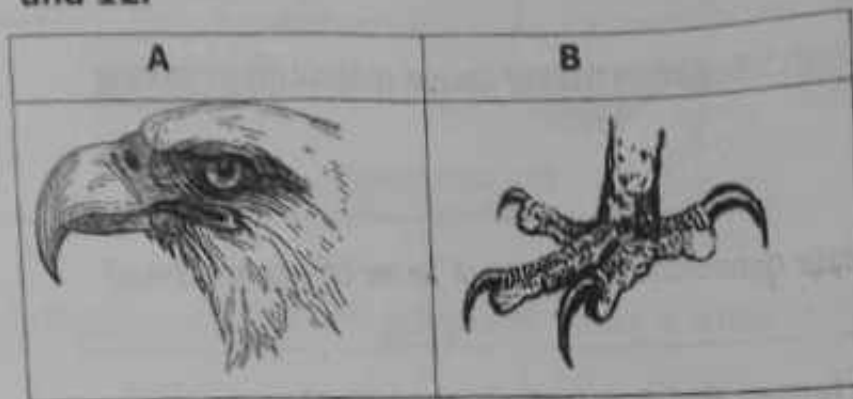
7. What does 2 x 3 refer to in drug prescription?

8. Apart from bacteria, mention **one** other kind of organisms which reproduce by binary fission

9. How are gills of a mushroom different from those of a fish in terms of their function?

10. State any **one** characteristic of red blood cells.

Study the diagrams below and use them to answer questions 11 and 12.



11. Name the group of birds with the beak marked **A**.

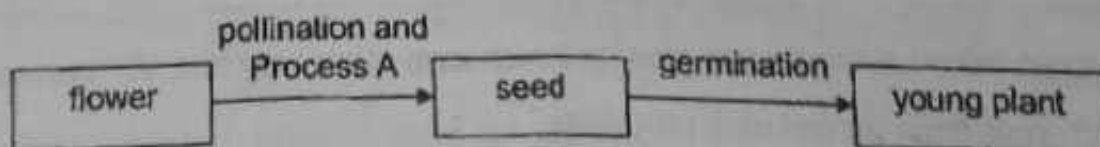
12. State the use of foot **B** to birds like eagles.

13. Give any **one** emotional change that occurs during adolescence.

14. State the role of a string when finding the volume of an irregular object.

15. Identify any **one** advantage of using a single movable pulley over a single fixed pulley.

The diagram below shows how a young plant developed from a flower. Use it to answer question 16.



16. Name the process marked **A**.

17. Mention **one** injury that occurs on ligament.

18. Why is tepid sponging applied to a person with fever?

19. Why does tape worm infestation mainly cause malnutrition among children?

20. How can a candidate determine the class of lever of any machine?

21. Which part of the human skeleton protects the heart?

22. State any **one** advantage of using biogas over firewood as energy resources.

23. State the function of a bulb to a clinical thermometer.

24. Mention any **one** way a mother can identify a dehydrated child.

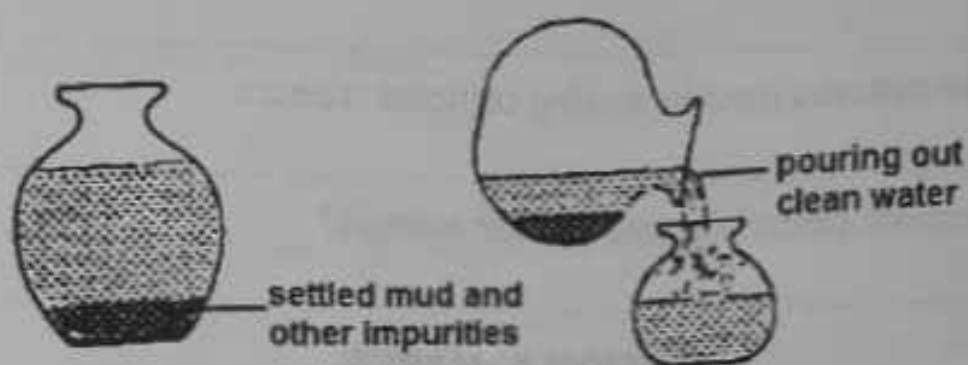
25. State **one** effect of soil erosion in the environment.

26. Apart from the heart, give **one** other part of the circulatory system.

27. State **one** way in which bacteria are useful to milk processing industries.

28. Apart from having a vent pipe, in which **one** other way is a VIP latrine different from an ordinary pit-latrine?

The diagram below shows a local method of purifying water. Use it to answer the questions **29** and **30**.



29. Which method of obtaining clean water is shown in the diagram?

30. Give **one** use of the clean water obtained from the above method at home.

31. Mention **one** factor that affects the rate of transpiration.

32. Apart from carbohydrates, mention any **one** other class of food that provides energy to the body.

33. State the difference between the movement of a frog and snake.

34. Give the use of a lactometer to a cattle farmer.

35. Write down **one** effect of too much alcohol to the human body.

36. Why are handles of frying pans made out of dry wood or plastics?

37. Mention **one** method of plant propagation.

38. State any **one** difference between insect pollinated flowers and wind pollinated flowers.

39. Identify **one** material used in making compost manure.

40. How can farmers control nagana in their animals?

SECTION B: MARKS

Questions 41 to 55 carry four marks each

41. (a) State the use of each of the following items in promoting personal hygiene.

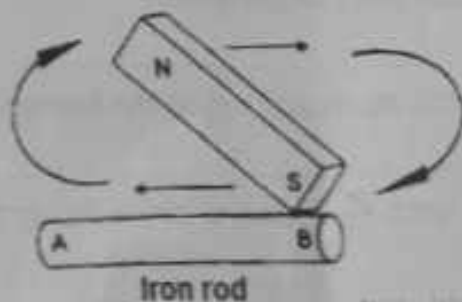
(i) Towel

(ii) Razorblade

(b) Give any **one** reason why it is important to bathe regularly.

(c) Mention any **one** disease spread due to poor personal hygiene.

42. Jane magnetized an iron rod with a magnet as shown in the diagram below. Use the diagram to answer the questions that follow.



a) Identify the method of magnetization that Jane used.

b) What is pole marked **B** likely to be?

c) Using only the objects shown above, what could Jane do if she wanted to increase the strength of the magnetized iron rod?

d) Mention **one** way how magnets are demagnetized.

43. (a) State any **two** differences between physical change and chemical change.

i)

ii)

(b) Mention any **one** change in states of matter caused by:

(i) Heat loss

(ii) Heat gain

44. (a) Apart from the age, mention any **two** factors considered when prescribing drugs.

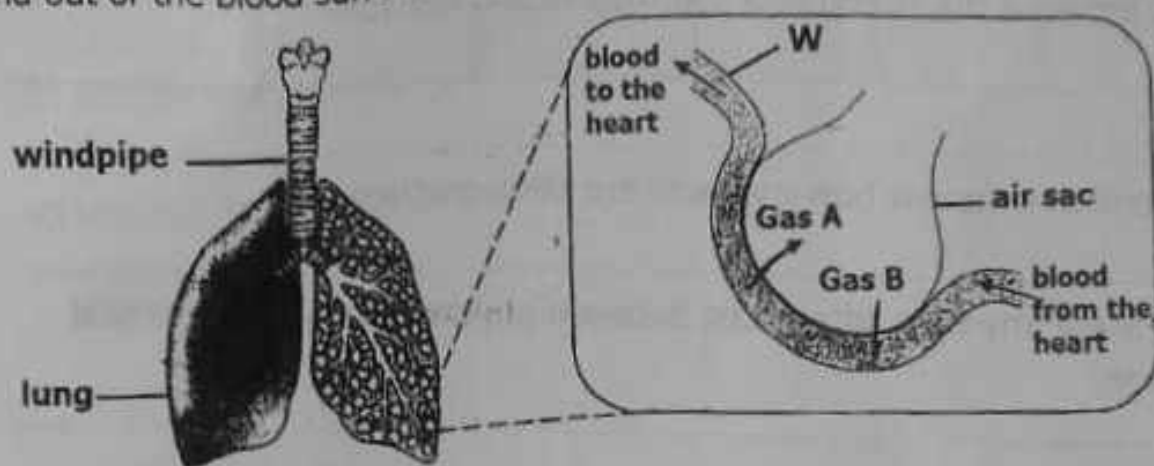
(i)

(ii)

(b) Why is it important to know the patient's age before prescribing a drug for him or her?

(c) Apart from sharing drugs, how else are drugs misused?

45. The diagram below shows the human respiratory system. The enlarged diagram of one air sac in the lung shows how Gas A and Gas B move in and out of the blood surrounding the air sac.



a) Name Gas A and Gas B.

- i) Gas A
- ii) Gas B

b) Identify the blood vessel labeled W.

.....

c) How is the windpipe adapted to keeping open all the time?

.....

46. The table below shows groups of animals arranged in sub-groups. Study it carefully and answer the questions that follow.

P	Q	R	S
Rat	Toad	Python	Emu
People	Salamander	Chameleon	Penguin
Whale	Newt	Lizard	Ostrich

a) To which group of animals do all the above belong?

.....

b) Name the class of animals to which animals in Q and S belong?

- i) Q
- ii) S

- c) How are animals in group **P** similar to those in group **S** in terms of body temperature?

.....
.....

47. (a) Which type of bees guards the hive?

.....

- (b) Why is the use of fire discouraged when harvesting honey?

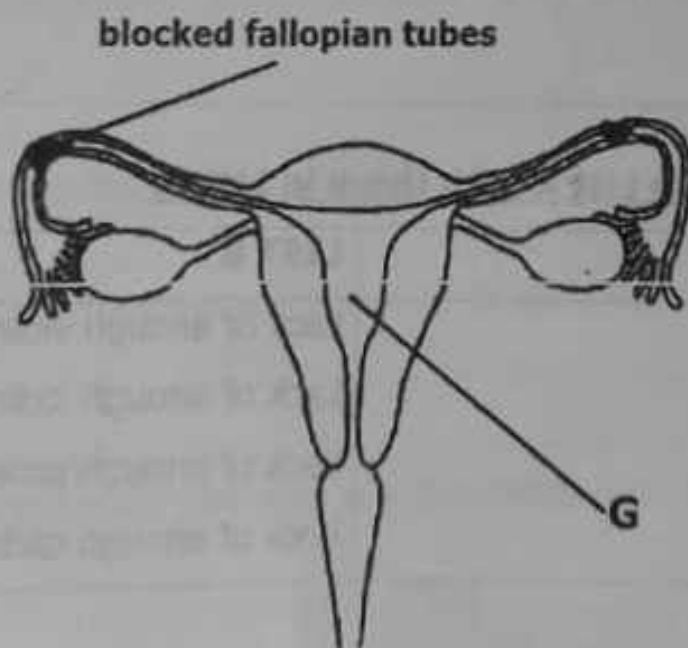
.....

- (c) Apart from honey, mention **two** other products farmers get from keeping bees.

(i)

(ii)

48. The diagram below shows the female human reproductive system. Both sides of the fallopian tubes are blocked. Use it to answer the questions that follow.



- a) Name the part labelled **G**.

.....

- b) How does the blocked tubes prevent fertilization from taking place?

.....

.....

c) Use an arrow letter **T** to label the part where the human reproductive cells are produced.

d) Mention **one** disorder of the female reproductive system.

49. (a) State the importance of molar teeth in human beings.

(b) How does the brushing of teeth every after a meal help to prevent tooth decay?

(c) Which element of Primary Health Care is promoted when one brushes teeth?

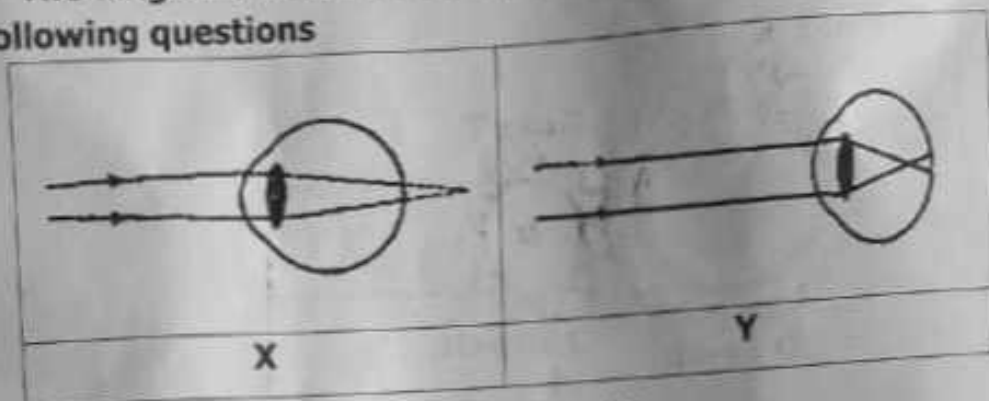
(d) Apart from brushing teeth, suggest any **one** other way of caring for your teeth.

50. Match items in List A with these in List B.

LIST A	LIST B
Kwashiorkor	Lack of enough vitamin C
Marasmus	Lack of enough iodine
Scurvy	Lack of enough proteins
Goiter	Lack of enough carbohydrates

- (i) Kwashiorkor
- (ii) Marasmus
- (iii) Scurvy
- (iv) Goitre

51. The diagrams below show eye defects. Use them to answer the following questions



a) Identify the eye defects marked X and Y.

i) X

ii) Y

b) Give **one** cause of eye defect X.

c) Suggest **one** way how eye defect Y can be corrected.

52. (a) Why is the biogas digester covered tightly during biogas production?

(b) By what process is biogas produced?

(c) Mention any **two** materials used in biogas production.

(i)

(ii)

53. (a) Apart from water, mention any **two** other non-living components of soil.

(i)

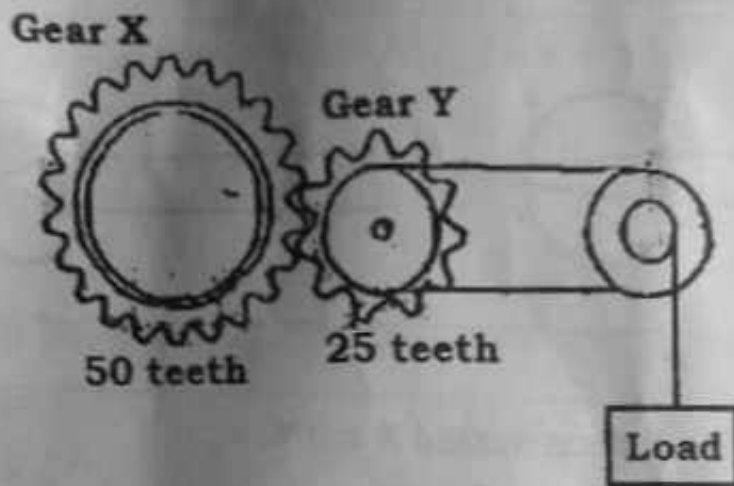
(ii)

(b) State any **two** ways in which mulching helps to control soil erosion in a garden.

(i)

(ii)

54. Use the diagram below to answer the following questions



a) Name the simple machine shown above.

b) Use arrows to show movement of wheels.

c) To which class of simple machines do the machines above belong?

d) How are toothed edges important to the machines above?

55. (a) Which communicable disease attacks both rabbits and human beings?

(b) State any **one** sign of the diseases named in (a) above.

(c) Give any **one** reason why a caged hutch should be raised above the ground.

(d) Apart from raising the hutch above the ground, mention any **one** other quality a good hutch should possess.

END

AUGUST 16TH.

ISAIAH 61:7

For your shame
ye shall have double and
for confusion they shall rejoice in
their portion, therefore in their land
they shall possess the double
everlasting joy shall be
unto them.