



SUREKEY EXAMINATIONS BOARD

PRE-PLC FINAL SET

2024

INTEGRATED SCIENCE

Time Allowed: 2 hours 15 minutes

Random NO.						Personal No.		

Candidate's Name:

Candidate's Signature:

School Name:

Read the following instruction carefully:

1. Do not forget to write your **school** or **district name** anywhere on this paper.
2. This paper has **two** sections: **A** and **B**
Section **A** has **40** questions and section **B** has **15** questions. The paper has **15 printed pages** altogether.
3. Answer **all** the questions. **All** answers to both sections **A** and **B** must be written in the spaces provided.
4. All answers **must** be written using a **blue** or **black** ball point pen or ink. Any work written in pencil will **not** be marked.
5. Unnecessary **changes** in your work and handwriting that cannot be read easily may lead to **loss of marks**.
6. Do not fill anything in the table indicated: **"FOR EXAMINERS' USE ONLY"** and boxes inside the question paper.

FOR EXAMINERS' USE ONLY		
QN.NO.	MARKS	EXR'S NO.
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. Name the units for measuring rainfall.

.....

2. Name **one** organism that causes rotting of food.

.....

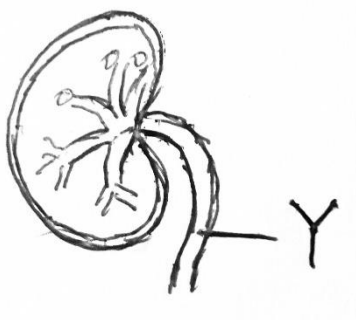
3. State the function of the stomach in the digestive system.

.....

4. Name **one** method used to control unwanted pregnancies.

.....

The diagram below shows a human body organ. Use it to answer questions **5** and **6**.



5. Name the organ shown above.


.....

6. State the function of the part marked **Y**.

.....

7. Name the organ in which insects that receives sound vibrations.

.....

8. Mention the exotic breed of rabbits mainly kept for production of fur.
.....
9. State any **one** way in which a magnet is important to a watch repairer.
.....
10. Write down any **one** sign of dysentery.
.....
11. Name the germ that causes cholera. 
.....
12. Mention any **one** material used to make the cork of a thermos flask.
.....
13. Identify **one** way in which air circulation in a rabbit hutch can be improved.
.....
14. Name any **one** type of latrines used by people in your community.
.....
15. State any **one** importance of fermentation in our daily life.
.....
16. Name the garden tool suitable for transplanting seedlings.
.....
17. Name any **one** non living natural source of light.
.....

The diagram below is of a bottle opener. Use it to answer questions **18** and **19**.



- 18. Name the type of simple machine above.
.....
- 19. Using an arrow, show the direction of the effort.
- 20. State the reason why transplanting is mainly done in the evening.
.....
- 21. Name any **one** vitamin we get from eating carrots.
.....
- 22. State **one** way in which planting of trees alongside other crops benefit the soil.
.....
- 23. Name the sense organ in the human body used for balancing the body.
.....
- 24. Identify any **one** effect of drug underdose to the patient/
.....
- 25. State any **one** property of matter.
.....

26. Name the part of the skeleton that protects the brain.

.....

27. Name the disorder in which a bone moves away from its normal position at a joint.

.....

28. Mention the source of energy used by plants in the process of photosynthesis.

.....

29. Name the commonly abused drug obtained by fermentation of starch.

.....

The diagram below is an example of an invertebrate. Use it to answer questions 30 and 31.



30. Name the animal shown in the diagram above.

.....

31. State the class of invertebrates to which the above animal belongs.

.....

32. State the function of the kidneys in the body

.....

33. State any **one** example of a chemical change.

.....

34. State any **one** effect of poor waste disposal to the environment.
-
35. State the reason why cotyledons that come out of the ground after germination appear green.
-
36. Mention any **one** characteristic of the eagle that makes it a bird of prey.
-
37. State **one** way in which scavenger birds can be important in the environment.
-
38. Identify any **one** way in which a pupil can utilize used up plastic bottles at home.
-
39. State the importance of the diaphragm in the process of breathing.
-
40. State **one** reason why a block of ice floats on a liquid.
-



SECTION B: 60 MARKS

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

41. (a) Mention any two practices that can result into cooked food getting contaminated at school.

(i)

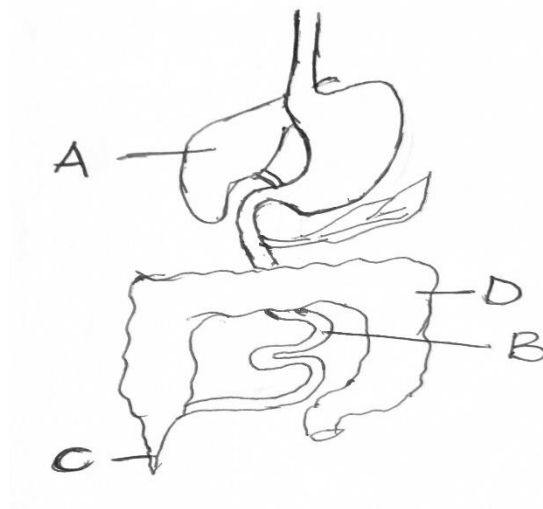
(ii)

(b) Give any **two** roles played by school children in the promotion of immunization in their community.

(i)

(ii)

42. The diagram below is of a digestive system. Use it to answer ~~the~~ questions that follow.



(a) Name the parts labelled **A** and **C**.

A

C

(b) State **one** function of each of the following parts.

B

D

43. (a) State the meaning of the term vaccine.

.....

.....

(b) Mention the way in which the following vaccines are administered.

(i) Polio vaccine :

(ii) Pfizer vaccine :

(c) State the reason vaccines should be stored in a cool place.

.....

44. (a) What is velocity ratio of a simple machine?

.....

.....

(b) A man used a force of 20N to push a log of wood weighing 80N through a distance of 10 metres. Work out the mechanical advantage.

45. (a) Name the part of a VIP latrine that;

(i) lets out bad smell

(ii) traps and kills flies

(b) State any **one** way of keeping a VIP clean.

.....

(c) State the reason why the pit hole of the VIP latrine should be left open at all times

.....

46 (a) Name the **two** muscles attached to the humerus bones

(i)

(ii)

(b) State any **one** function of muscles in the human body.

.....

(c) Give the importance of maintaining correct posture in humans.

.....

47 (a) What is meant by the term anti-social behaviour?

.....

.....

(b) State **one** way in which the good behaviour of parents helps to control anti-social behaviour in their children

.....

(c) State any **two** roles played by the school in the control of anti-social behaviour in children

(i)

(ii)

48 Study the diagram below about a system of rearing birds and answer the questions that follow.



- (a) Name the system of poultry shown above.
.....
- (b) Identify any **one** poultry vice that can be controlled by this system.
.....
- (c) Give any **two** advantages of this system.

49 The table below shows the tree management practices in **A** to their meanings in **B**.

Part A: Practice	Part B: Importance
Lopping	Cutting trees at stump level
Coppicing	Cutting side branches
Pollarding	Cutting less productive part of the plant
Pruning	Cutting top branch

Match the tree management practices in A to their meanings in B correctly in the space provided below.

- (i) Lopping
- (ii) Coppicing
- (iii) Pollarding

(iv) Pruning

46 A maid was boiling milk in the kitchen. She accidentally stepped on the firewood and hot milk poured onto her leg.

(a) Name the type of accident the maid got.

.....

(b) What first aid would you give to her?

.....

(c) State any **two** ways in which such accidents can be prevented.

(i)

(ii).....

51. The table below shows some of the vectors, the diseases they spread and how they are spread. Study and fill in the missing gaps.

Vector	Disease	How it spreads diseases
Anopheles mosquito	By biting
Cockroach	Typhoid
.....	Relapsing fever	By sucking blood
Tsetse fly	By biting

52. (a) Mention the **two** materials used in a digester to produce biogas.

(i)

(ii)

(b) Why should a biogas digester be tightly sealed?

.....

(c) State **one** advantage of biogas.

.....

53. Describe the process of making a solution of local salt from plant materials at home.

(i)

.....

(ii)

.....

(iii)

.....

(iv)

.....

54. Mention one example of a musical instrument in each group below.

(i) String instrument

(ii) Percussion instrument

(b) Name any **two** methods of storing sound.

(i)

(ii).....

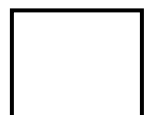
55.(a) Apart from the earth, name **one** other example of natural magnets.

.....

(b) State any **one** way of keeping a pair of bar magnets

.....

(c) Name any **two** home devices that use magnetism.



(i)

(ii)