



SUREKEY EXAMINATIONS BOARD
SPECIAL MOCK EXAMINATION
2024

INTEGRATED SCIENCE

Time Allowed: 2 hours 15 minutes

EMIS NO.					Personal No.		

Candidate's Name:

Candidate's Signature:

School Name:

Read the following instruction carefully:

1. Do not forget to write your **name** and **school 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 **16 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		



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SECTION A: 40 MARKS

Questions 1 to 40 carry one mark each

Name the material used to control excessive bleeding at the cut when giving first aid.

State any **one** sign to show that a hen is suffering from coccidiosis.

Give any **one** way in which you can identify a pigeon from a whale as vertebrates.

State any **one** method that can be used to conserve heat energy at home.

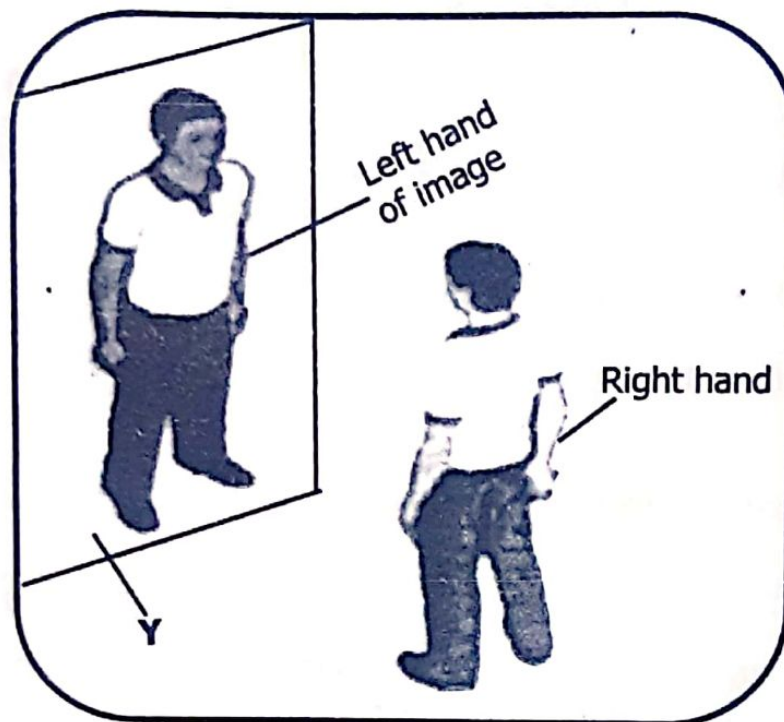
In which **one** way are villi important in the ileum during food absorption?

Write down any **one** disease that can be controlled among school children by wearing properly ironed uniforms.

Name any **one** component of the environment that helps to add water vapour to the atmosphere during the formation of nimbus clouds.

Name the blood cells that produce antibodies against germs in the human body.

The diagram below shows a man viewing his image in a mirror. Study and use it to answer questions **9** and **10**.



9. Name the type of mirror marked **Y**.

.....

10. What property of light enables the man to see his image through the mirror marked **Y**?

.....



11. Give any **one** way in which force of gravity is applied in our daily life.

.....

12. State any **one** way in which you can tell that the child has protein deficiency in the body.

.....

13. Give any **one** reason why farmers construct the goat sheds with a slanting floor

.....

14. State any **one** rule which must be followed when carrying out Primary Health Care (PHC).

.....

15. State any **one** factor considered when classifying the type of metamorphosis in insects.

.....

16. Give any **one** reason why pregnant women usually go for ante-natal care.

.....

The diagram below shows a symbol commonly used in the management of wastes in an area. Use it to answer questions 17.



17. State the significance of the symbol above in the management of wastes in an area.

.....

18. Name any **one** substance that is reabsorbed by the medulla from urine.

.....

19. Which chemical substance is released in the atmosphere during tobacco smoking by an active smoker?

.....

20. Give any **one** way in which rainfall is useful for plant growth.

.....



21. Give any **one** way in which you can produce static electricity in the classroom during an Integrated Science lesson.

.....

22. State any one way in which adolescent girls care for their bodies during menstruation periods.

.....

23. State the reason why woolen clothes should be dried without wringing.

.....

24. Give any **one** vector that has two main body divisions and four pairs of jointed legs.

.....

25. State any **one** way in which the immunity of an individual can be boosted.

.....

26. Mention any **one** activity carried out under child to child programme at school.

.....

27. In which way can a person lower the pitch of sound produced by a guitar?

.....

28. State any **one** reason why the rabbit hutch should be raised above the ground.

.....

29. Mention any **one** substance that the human body uses to produce energy.

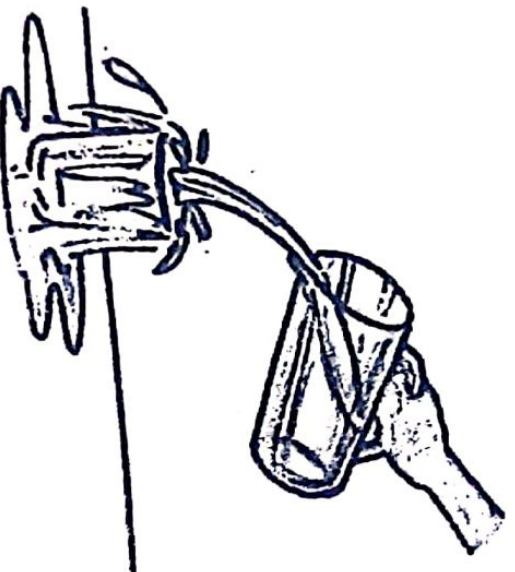
.....

30. Give any **one** way in which fungi are different from bacteria.

.....

.....

The diagram below shows a property of matter. Use it to answer questions **31** and **32**.



31. Why does water overflow the cup as shown in the diagram above?

.....

32. State the property of matter shown in the diagram.

.....

33. State any **one** way in which a cesspool emptier is important in the promotion of sanitation in the community.

.....

34. State any **one** factor that determines the strength of an induced magnet.

.....

35. Apart from burning, give any **one** other example of a chemical change that requires oxygen to take place.
-

36. Write down any **one** plant that has compound leaves.
-

Use the diagram of the animal below to answer questions **37** and **38**.



37. Identify the class of vertebrates to which the above animal belongs.
-

38. How does part marked **L** help to promote the health of the animal above?
-

39. Name any **one** method that can be used to separate the mixture of liquids and insoluble substances.
-

40. Give any **one** reason why a person making charcoal covers the logs of wood with soil.
-



SECTION B: 60 MARKS

Questions 41 to 55 carry four marks each

41. (a) Write any **two** ways in which a bee keeper can stock the hive.

(i)

(ii)

(b) State any **two** ways in which a bee keeping business is important to a bee keeper.

(i)

(ii)

42. (a) Give the meaning of the following terms;

(i) An invalid :

.....

(ii) A convalescent:

.....

(b) State any **two** reasons why health workers discourage mothers from feeding their babies using bottles.

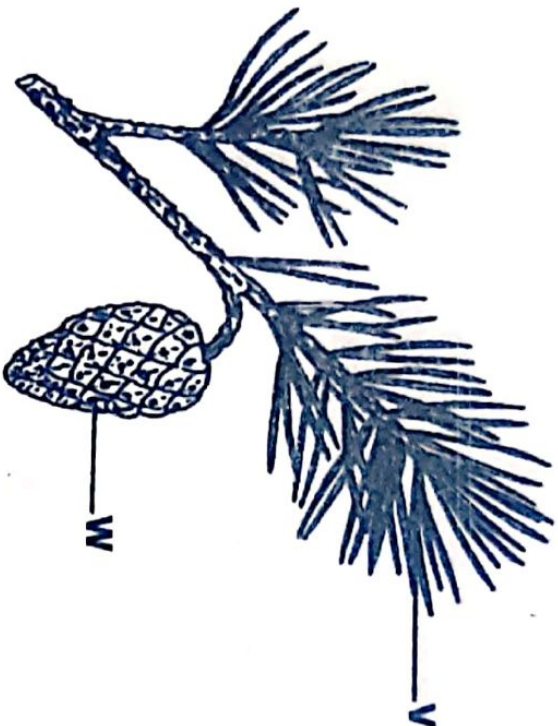
(i)

.....

(ii)

.....

43. The diagram below shows a pine plant. Study and use it to answer the questions that follow.



(a) Name the part of the pine tree marked **V**.

.....

(b) State the reproductive function of part marked **W** to a pine plant.

.....

(c) Apart from the pine plant, give any **two** other plants that has part marked **V**.

(i)

(ii)



44. Lilian kept porridge in a vacuum flask when it was at a temperature of 90°C . After 6 hours, the temperature of the porridge had decreased by 50°C .

(a) What was the temperature of the porridge after 6 hours?

.....

(b) State any **one** factor that could have caused the drop in the temperature of the porridge in the vacuum flask.

.....

(c) Change the temperature of the porridge given in (a) above to Fahrenheit scale. (02 Marks)

45. (a) Give any **one** example of a mollusc that lives both in water and on land.

.....

(b) State any **two** ways in which you can identify molluscs in the environment.

(i)

(ii)

(c) Mention any **one** way in which people benefit from molluscs.

.....

46. The diagram below shows a method of harvesting tuber crops. Study and use it to answer the questions that follow.



- (a) Identify the method of harvesting tuber crops shown above.

.....

- (b) State any **one** disadvantage of using the method above to tuber crops.

.....

- (c) Write down any **two** tuber crops that can be harvested using the method shown above.

(i)

(ii)



47. Name the body organ that;

- (a) stores bile juice:
- (b) removes lactic acid from the body:
- (c) adds oxygen in the body:.....
- (d) releases mature ova:.....

48. (a) Name the germ that causes bilharziasis in humans.

.....

(b) Mention any **two** signs of bilharziasis in humans.

(i)

(ii)

(c) State any **one** way in which the spread of bilharziasis can be controlled among humans.

.....

49. (a) Name the part of the human ear that changes;

(i) sound waves into vibrations:

(ii) vibration into impulses:

(b) Which defect of the ear is caused by too much wax in the auditory canal?

.....

(c) State any **one** way of preventing the defects of the human ear.

.....



50. The table below shows methods of applying fertilizers in part A and their way of application in part B.

Part A: Method of Applying fertilizers	Part B: Application
Broadcasting	Fertilizers are placed in a ring around the plant
Spraying	Fertilizers are put into the planting holes
Placement	Fertilizers are spread all over the soil
Top dressing	Liquid fertilizers are sprinkled onto the soil

Match correctly the methods of applying fertilizers with their application in the space provided below.

- (i) Broadcasting:
- (ii) Spraying:
- (iii) Placement:
- (iv) Top dressing:

51. (a) Mention any **two** causes of truancy among school children.

- (i)
- (ii)

- (b) Apart from truancy, state any **two** other forms of anti-social behaviour commonly practised by school children.

- (i)
- (ii)

52. The diagrams below show types of cattle. Study and use it to answer the questions that follow.

J



K



- (a) Name the types of cattle marked **K** and **J**.

(i) **J** :

(ii) **K** :

- (b) Give **one** reason why the purpose of keeping the type of cattle marked **K** is similar to the one of keeping Light Sussex in poultry management.

.....

- (c) State any **one** physical difference between the type of cattle marked **K** and the one marked **J**.

.....



53. (a) Give any **two** causes of choking to an individual.

(i)

(ii)

(b) State any **one** way in which choking affects a person.

.....

(c) Write down any **one** activity that you can carryout at home to help your sibling who has been choked while eating meat.

.....

54. You are provided with the following materials;

Half kg of maize flour, water, a mingling stick and a saucepan.

After putting water in a saucepan and boiling it, write **four** other steps you will take to prepare posho at home.

(i)

.....

(ii)

.....

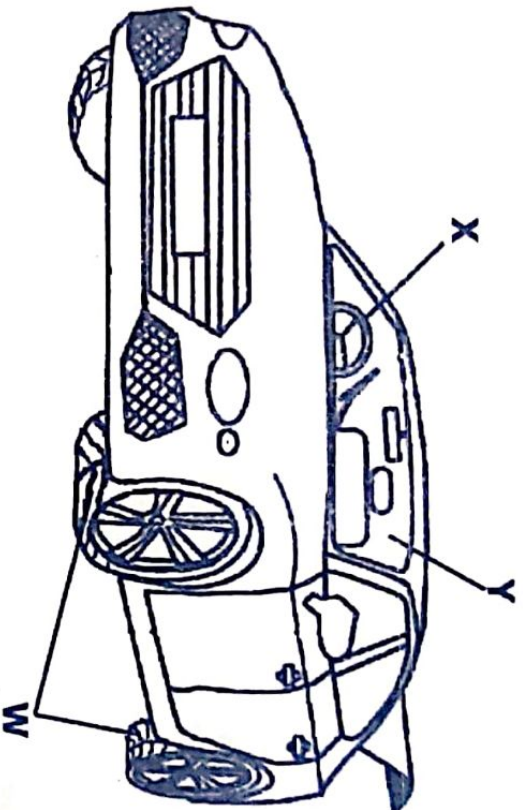
(iii)

.....

(iv)

.....

55. The diagram below shows a car. Study and use it to answer the questions that follow.



- (a) Identify the group of simple machines to which part marked **X** belongs.

.....



- (b) Give **one** way in which structures marked **W** help to increase friction on the car tyre.

.....

- (c) State any **one** way in which the material used to make part of the car marked **Y** is similar to the one used to make the glass envelope of an electric bulb.

.....

.....

- (d) State any **one** way in which part marked **X** helps to make the driving of the car easier.

.....

