

KAMPALA ARCHIDIOCESE CATHOLIC PRIMARY SCHOOLS (KAPSMA)

MOCK EXAMINATION 2022

PRIMARY SEVEN

SCIENCE

Time allowed 2hrs 15 minutes

Date: _____

INDEX No.

Candidate's Name: _____

School Name: _____

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO

Read the following instructions carefully.

1. This paper is made of Section A and B.
 2. Section A, has 40 questions (40 marks) and Section B has 15 questions (60 marks).
 3. Attempt all questions. All answers to both sections A and B must be written in the spaces provided.
 4. All answers must be written using blue or black ball-point pen or ink.
 5. Unnecessary alteration of work will lead to loss of marks.
 6. Any handwriting that cannot easily be read may lead to loss of marks.

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SECTION	EXAMS MARKS	T/L MARKS	OFFICE
A			
B			
TOTAL			

SECTION A

1. Name any one group of organism that help in the formation process.

2. Which state of matter have a definite volume but no definite shape?

3. Give one use of a black stone found in a first aid box.

4. Briefly explain what happens to the mass of wood when wood is burnt to ash.

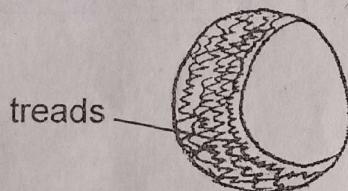
5. How is the circulatory system important to the excretory system?

6. Why should a VIP latrine be built 10 metres away from a living house.

7. How is reproduction in conifers different from that in algae?

Use the diagram below to answer question 8.

8.



Give one reason why treads are put on the tyre.

9.

Name any one egg laying mammal.

10.

State any one way of controlling dental carries.

11.

How can a crop farmer prevent land wastage after planting seeds and some fail to germinate.

12.

State any one human cause of swarming in bees.

13.

Why is it necessary to use insulators like papers when lifting hot objects?

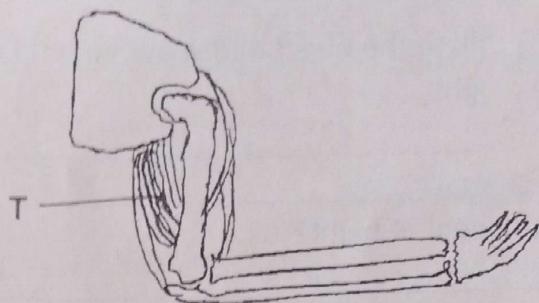
14.

Give any one sign of sickness in farm animals.

15.

State one common way in which houseflies spread disease germs to human.

The diagram below shows a human arm. Use it to answer question 16.



16. Give any one function of part marked with letter T.
-

17. Name any one water impurity.
-

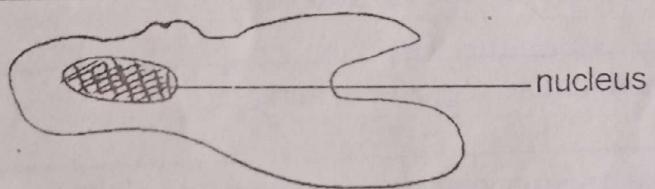
18. How would you separate a mixture of water and ethanol?
-

19. Which vaccine is given to children at age of 9 months?
-

20. Why do electric wires appear tight between poles on a cold day?
-

21. State one danger of leaving left over food uncovered.
-

The diagram below shows a blood component. Use it to answer question 22.



22. Name one common sexually transmitted disease that affects the above blood component.
-

23. Give any one way of controlling tape worm infestation in humans.
-

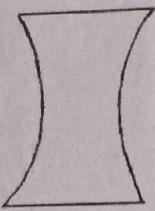
24. Give any one example of a thermometric liquid.
-

25. In which type of smoking does a person inhale smoke directly from burning tobacco?
-

26. Why is sorting clothes an important step before washing?
-

The diagram below shows a concave lens. Use it to answer question 27.

27.



State the effect of the above lens on a parallel beam of light.

28. Why do some flowers have scent at night?

29. Why is the delivery tube made coiled in cold water during distillation of alcohol?

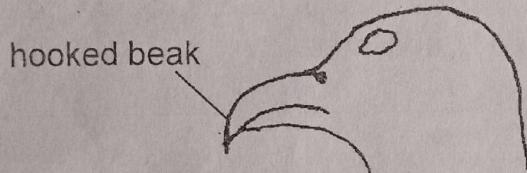
30. How are valves found in the heart important during blood circulation?

31. Why is it necessary to keep garden tools in a cool dry place?

32. What type of immunity does a child get through recovering from illness?

The diagram below shows a beak of a bird. Use it to answer question 33 and 34.

33.



Name one bird with such a beak.

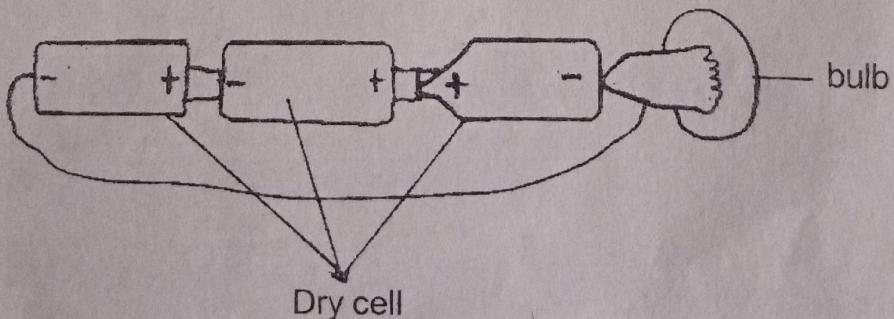
34. What does a bird with such a beak feed on?

35. State the main cause of goiter in humans.

36. Give any one reason why young girls should avoid teenage pregnancy.

37. Where does a cassava plant obtain its food when its leaves fall off?

38. Ali connected three dry cells to a bulb as shown below.



Give one reason why the bulb did not produce light as shown in the diagram above.

39. How is sweating important to the body?

40. Name any one system of keeping poultry, that keeps very few birds on the farm.

SECTION B

41. a) Give two electronic methods of storing sound.

i. _____

ii. _____

b) State one way of increasing the pitch of a guitar.

c) Why can't sound travel through a vacuum?

42. a) Give two energy resources from animals.

i. _____

ii. _____

b) Name one fuel that is obtained from animal wastes.

c) Why are animals regarded as renewable resources?

43. a) Why do some people keep work type cattle?

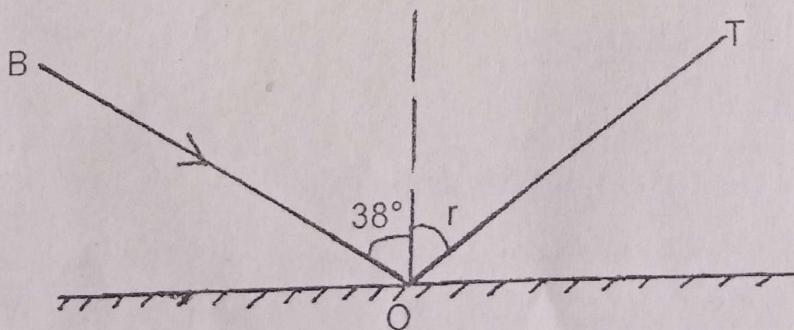
b) State two ways of improving on local breeds of cattle.

i. _____

ii. _____

c) What is the importance of tail bobbling in cattle management?

44. Study the diagram below and use it to answer questions that follow.



a) Find the size of angle r.

- b) Give a reason for your answer in (a) above.
- c) Put an arrow head on line OT to complete the above diagram.
- d) How is reflection of light important in our daily life?
-
45. a) Give any two agents of seed dispersal.
i. _____
ii. _____
- b) State two ways plants benefit from seed dispersal.
i. _____
ii. _____
-
46. a) To which group of invertebrates does a millipede belong?

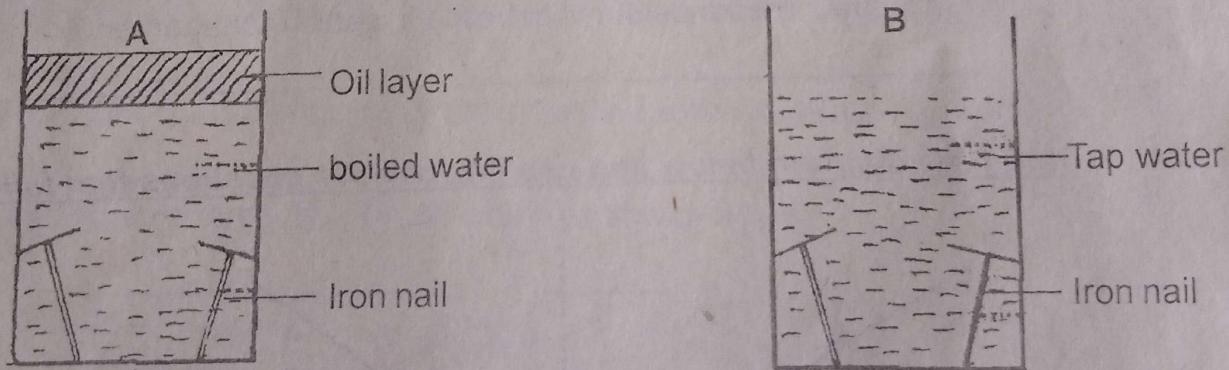
- b) What type of skeleton does a millipede have?

- c) Give one characteristic common to all invertebrates.

- d) Why do some invertebrates moult?

-

47. In an experiment, dry iron nails were dipped in boiled water and covered with an oil layer as shown in A. The same nails were dipped in tap water as shown in B. Use the diagram below to answer the questions that follow.



- a) Why did the nails in B rust after some time?

- b) State the importance of each of the following in the experiment
i. Oil layer _____
ii. boiled water _____
- c) What type of change took place in container marked B above?

-

48. a) Name two bad health habits that may affect the stomach.

i. _____

ii. _____

b) How does food move through the gullet to reach the stomach?

c) What is the function of enzymes during food digestion?

49. a) A machine is used to raise a load of 60N through a distance of 10 metres. Using an effort of 20N. If the effort moves through a distance of 40 metres. Calculate the efficiency of the machine.

b) Name one force that affects the efficiency of a machine.

50 a) What type of blood is carried by the renal artery of the kidney?

b) Where does filtration of blood take place in the kidney?

c) Apart from kidneys, name any other part of the urinary system.

d) Why do we urinate a lot on cold days than on hot days?

51. Match plants in list P with their mode of propagation in B correctly.

A

Cassava

Carrots

Banana

Irish potato

B

using suckers

using stem cuttings

using stem tubers

using seeds

a) Cassava _____

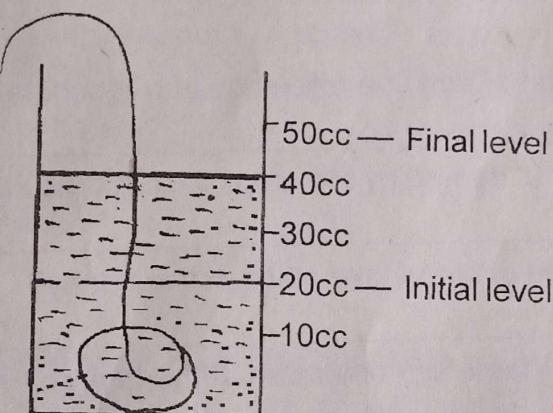
b) Carrot _____

c) Banana _____

d) Irish potato _____

52. a) Name any two health aspects to consider when carrying out a health survey.
- i. _____
- ii. _____
- b) In which two ways does a community benefit from carrying out a healthy survey?
- i. _____
- ii. _____
53. a) Why is the trachea able to remain open all the time?
- b) Name two lung diseases caused by smoking.
- i. _____
- ii. _____
- c) How can the respiratory system be kept in good working condition?
- _____

54. Study the diagram below and use it to answer questions that follow.



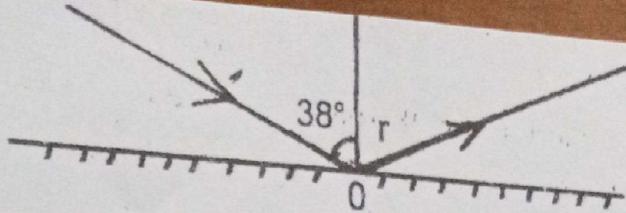
- a) What is the above method of finding volume used?
- _____
- b) Find the volume of the orange in the diagram above.
- _____
- c) Give one characteristic of sinking objects.
- _____
55. a) State any two causes of soil erosion.
- i. _____
- ii. _____
- b) How can soil erosion be controlled in our home compound?
- i. _____
- ii. _____

MARKING GUIDE FOR SCIENCE MOCK 2022

1. bacteria / fungi
3. It is used when giving first aid for a snake bite
5. It transports waste materials
7. Conifers reproduce by seeds while algae reproduce by spores.
8. To increase friction
10. brushing teeth / dental flossing / going for medical check up
11. Through gap filling
12. Too much noise near the hive/ bad smell near the hive.
13. To avoid burns / scalds
14. dullness / loss of appetite / rough hair on skin / coughing / sneezing
15. By contaminating food
16. To allow body movement / to store energy
17. agro chemical / animal waste / plant wastes / silt from erosion
18. by distillation
19. measles vaccine
21. It leads to food contamination
23. Eating well cooked meat / deworming / proper disposal of feaces
24. mercury / alcohol
26. It prevents coloured clothes from staining others./ prevents very dirty clothes from staining less dirty clothes.
27. It diverges light rays.
29. To condense steam
31. To prevent rusting
33. eagle / owl / hawk / falcon / secretary bird
35. lack of Iodine
36. To avoid school dropout / obstructed labour / forced marriage / difficult delivery
37. from roots
39. It cools the body
2. liquids
4. It reduces
6. To keep away bad smell
9. Duck billed platypus / spiny anteater
20. Due to contraction
22. HIV / AIDS
25. Active smoking
28. To attract pollinators
30. To prevent the back flow of blood
32. Natural immunity
34. flesh
36. The dry cell were poorly arranged
40. Pen system / battery cage system

SECTION B

41. a) i) Solfa notation ii) staff notation
b) by tightening the string
c) There is no matter / air
42. a) i) for transport ii) for ploughing
b) biogas / methane
c) - They can be replaced naturally once used up.
- They can't get finished
43. a) for ploughing
b) i) cross breeding ii) proper feeding
c) It helps in identification of animals
44. a) Since $Li = Lr$
 $Lr = 38^\circ$
b) The angle of incidence is equal to the angle of reflection



- d) It enables us to see objects.
45. a) animals / wind / water / self dispersal
b) - Plants colonise new areas. - It ensures plant survival
46. a) Arthropods / myriapods b) exo skeleton c) They have no back bones
d) To increase in size
47. a) Presence of water and oxygen
b) i) To prevent oxygen from entering. ii) To dive / remove off oxygen in the water.
c) Chemical change
48. a) smoking / taking alcohol b) peristalsis
c) To spread up the rate of food digestion
49. a) Efficiency = $\frac{\text{work out put}}{\text{work in put}} \times 100\%$
- $$= \frac{60\text{N} \times 10\text{m}}{120\text{N} \times 40\text{m}} \times 100\%$$
- $$= \frac{3}{25} \times 100\%$$
- $$= \frac{3}{14} \times 100\%$$
- $$= 75\%$$
- b) Friction.
50. a) Oxygenated blood b) cortex c) Ureter / urinary bladder
d) More blood needs to be filtered as many body organs need plenty of blood to be pumped to them at a high speed.
51. a) Using stem cuttings b) Using seeds c) Using suckers d) Using stem tubers
52. a) latrine / toilet / bathroom / kitchen / drying lines / rubbish pit / houses for domestic animals.
b) - It helps in sensitisation - It helps in providing health services.
- It helps in monitoring health programmes.
- It helps in providing services
- It helps to identify health needs of community.
53. a) It has rings of cartilage
b) - emphysema - lung cancer
c) - Doing regular physical exercise.
- Eating a balanced diet.
- Going for regular medical checkup.
54. a) When finding volume of irregular objects
b) $\text{Vol} = L_2 - L_1$
 $= 40\text{cc} - 20\text{cc}$
 $= 20\text{cc}$
c) They displace water equal to their volume
55. a) - Over grazing - bush burning - over cultivation
b) - planting short grass. - planting trees - fencing