

ST. KIZITO – COLOMA JOINT PRE-PLE EXAMINATIONS, 2022

INTEGRATED SCIENCE

Time Allowed: 2 hrs 15 mins

Index No.

Random no.					Personal no.		

Candidate's Name

Candidate's Signature

School Name

EMIS No.

SECTION A

1. Name one substance that can exist in all the three states of matter.

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2. Give a reason why you think that brushing teeth prevents tooth decay?

.....

3. Which body system is affected by the plasmodium germ?

.....

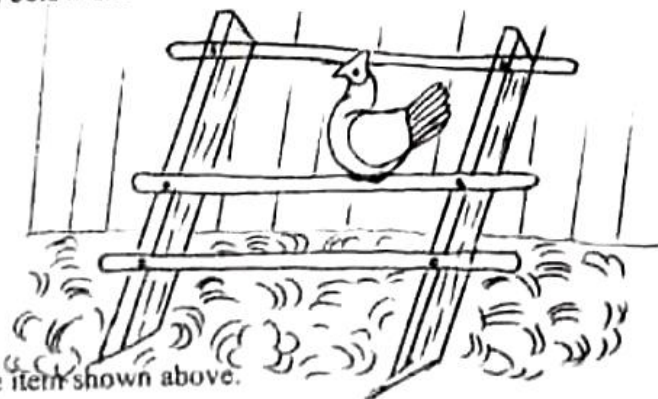
4. Which type of energy is possessed by a passenger sitting in a moving car?

.....

5. Which part of an eye functions like the diaphragm of a lens camera.

.....

The diagram below shows an item commonly used in a poultry house. study it and use it to answer questions 6 and 7.



6. Name the item shown above.

.....

7. In which one way is the item shown in diagram above useful in a poultry house.

8. In which part of the digestive system does absorption of water take place.

9. Name the common antiseptic that can be made from every home.

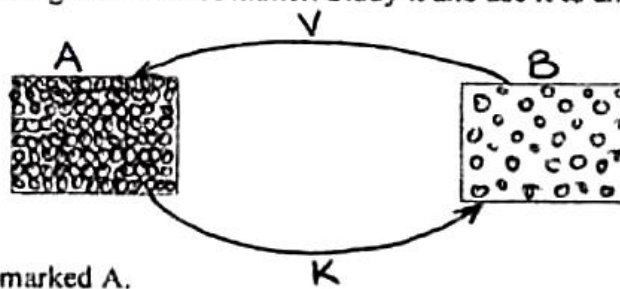
10. Why is it not advisable to pour paraffin into a pit latrine.

11. State one advantage of family planning to a mother.

12. How does smoke from fire in the kitchen reach other areas in the same room.

13. Name the organ in livestock that is damaged by flukes.

The diagram below shows changes of state of matter. Study it and use it to answer questions 14 and 15.



14. Identify the state of matter marked A.

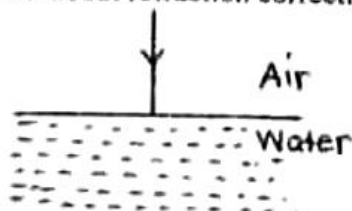
15. Which of the above process requires heat gain.

16. Name the biological method of controlling mosquitoes in the environment.

17. State one advantage of keeping local breeds of goats over exotic breeds.

18. State any one cause of dehydration among infants.

19. Complete the ray diagram about refraction correctly.



20. How is the feeding of a hyena related to that of vultures?

.....

21. What first aid would you give to Sarah who has been burnt with steam.

.....

22. Apart from bone marrows of long bones, which other part of the body makes white blood cells.

.....

23. Why does a bedbug produce a very bad smell when it is touched?

.....

24. Why should harvesting of crops be done during dry season?

.....

25. State the main reason why an in calf should be steamed up.

.....

26. Name the disease vector that spreads rabies to humans.

.....

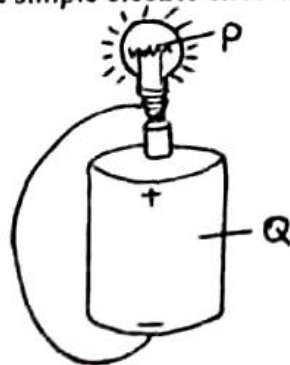
27. Why are ostriches regarded as flightless birds.

.....

28. State the function of a root cap to a plant.

.....

The diagram below shows a simple electric circuit. Study it and use it to answer questions that follow.



29. Name the part marked P.

.....

30. What energy change takes place in part marked Q when the circuit is complete.

.....

31. Name any one non-infectious disease of the lungs.

.....

32. Give any one emotional change that occurs in boys and girls during adolescence.

33. Name any one method of applying fertilisers on soil.

34. Which arachnid has a different mode of reproduction?

35. How are wading birds adapted to walking in water?

36. Why should vaccines be kept in a cold chain?

37. Name the proper method of harvesting trees where a tree is cut from the stump level.

38. In which way does a cork of a vacuum flask prevent heat loss?

39. Name any one property of friction.

40. Differentiate between drug abuse and drug misuse.

SECTION B

41). In the table below, list A shows the different animals from those in list B. Use it to answer questions that follow.

List A	List B
a). frog	i) goat
b). crocodile	ii). tiger
c). dove	iii). mouse
d). tilapia	iv). seal

a). Give one similarity between animals in list A and B.

b). To which group of vertebrates do animals in list B belong.

c). How is a dove different from tilapia in the way they move?

d). Why would you group a dog in group B?

.....
.....

42(a). Apart from splints, which other structure keeps the broken bone of the arm in one position.

.....

b). Mention the type of accidents that requires the use of splints.

.....

c). Suggest one reason why a good first aider should be knowledgeable.

.....

d). Suggest the first aid you would administer to a person with an insect ear.

.....

43(a). State the role played by each of the following in reproduction.

i). sperm

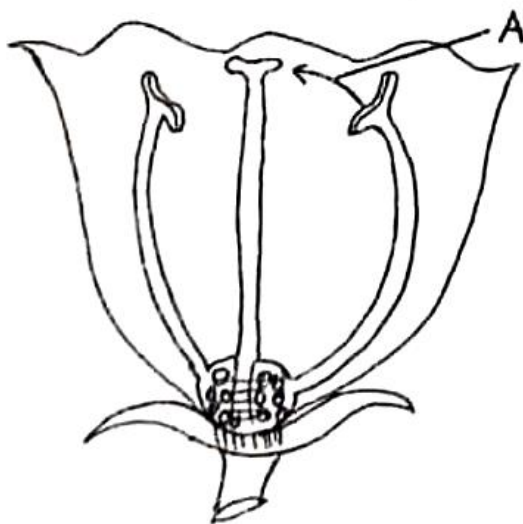
ii). umbilical cord

iii). placenta

b). Name the hormone produced from the male testes of the human being.

.....

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



a). Name process A.

.....

b). Mention the process that follows the process you have named in (a) above.

.....

c). State two observable changes that take place in a flower after the processes you have named in (b) above have taken place.

i)

ii)

45(a). What is incubation?

.....

b). Give one advantage of artificial incubation in poultry management.

.....

c). Of what importance is litter in a poultry house?

.....

d). Mention one factor that may make a fertilised egg to fail to hatch.

.....

46(a). What term is used to refer to a group of people who can easily be harmed to due to poor feeding.

.....

b). Mention any two examples of such people you have named in (a) above.

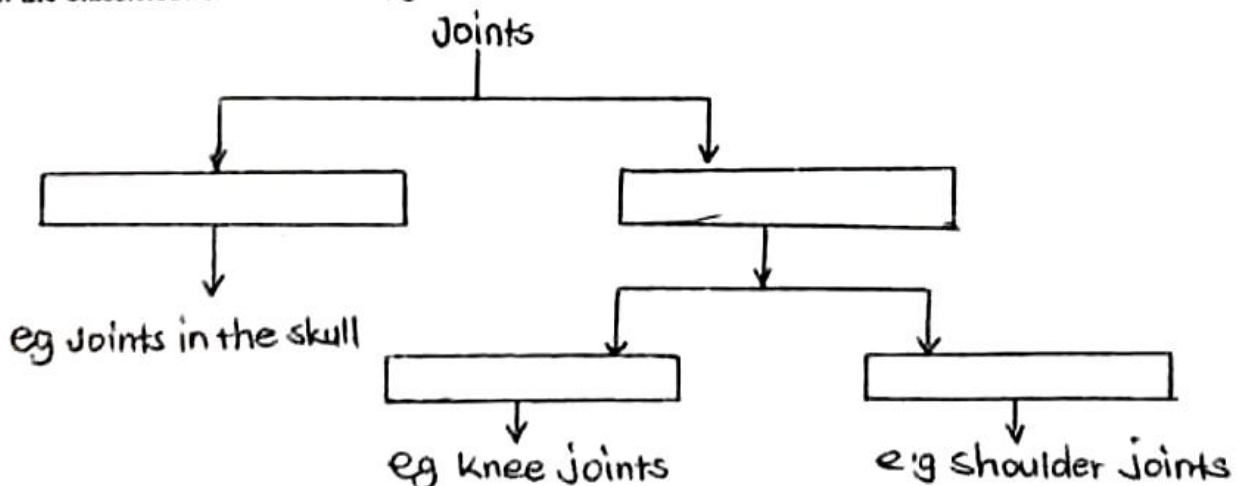
i)

ii)

c). Why should babies be fed on foodstuffs rich in proteins.

.....

47. In the classification table below, give a suitable sub heading in each of the boxes.



48(a). Name two examples of health concerns in our community

i)

ii)

b). State two reasons for carrying out health surveys.

- i)
- ii)

49. In the table below, part A shows animals and part B shows their mode of feeding.

A: Animals	B: Mode of feeding
a). moles	i). eats leaves from trees shoots.
b). tape worms	ii). sucks sap from tender leaves.
c). aphids	iii). eats tubers from underground.
d). locusts	iv). feeds on digested food

Write correct mode of feeding for each animal

- a). moles
- b). tapeworms
- c). aphids
- d). locusts

50(a). Write SOPs in full as in COVID-19 management.

b). Why are COVID-19 patients always put in quarantine?

c). State the reason why COVID-19 is referred to as a pandemic.

d). Which body organ is greatly affected by COVID-19.

51(a). State two causes of soil erosion.

- i)
- ii)

b). Mention two ways of controlling soil erosion in hilly areas.

- i)
- ii)

52. Outline the steps taken when preparing ORS locally at home.

- i).....
- ii).....
- iii).....
- iv).....
- v).....

53(a). Mention two types of scales used in measuring temperature.

- i)
- ii)

b). Why is mercury commonly used in thermometers more than alcohol?

.....

c). Give a reason why mercury sinks in water?

54(a). State any two structural differences between arteries and veins.

- i)
- ii)

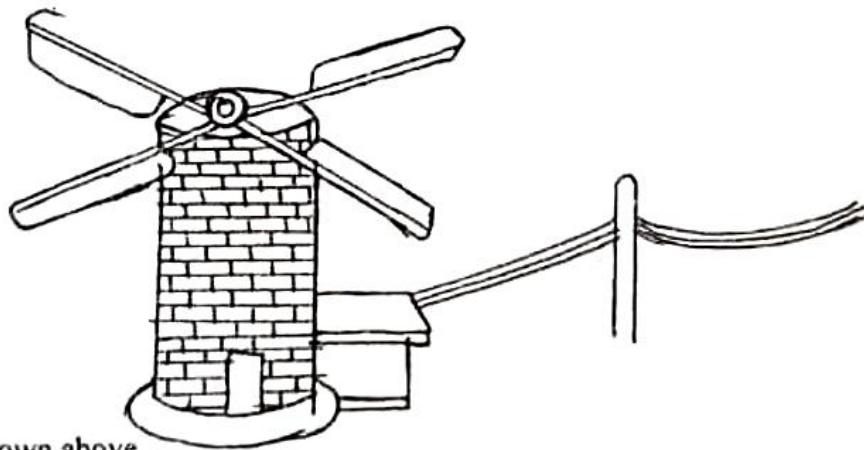
b). Why is blood first pumped to the lungs before it is pumped to other body parts.

.....

c). Give the reason why blood should be screened before transfusion.

.....

55. The diagram below shows a device that uses wind to function. Study it to answer the questions that follow.



a). Name the device shown above.

.....

b). State two ways in which the above device is useful to people.

- i)
- ii)

c). Apart from the above device, mention any one other device that uses wind to function.

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