## **KOLFRAM EDUCATIONAL SERVICES KAMPALA**



**Index Number:** 

# PRE MOCK SET VII EXAMINATION 2023

Personal Number

### **INTEGRATED SCIENCE**

Time allowed: 2 hours 15 minutes

**Random Number** 

|  |           |         |                |                 |                |                    |                        |        |  | 1                |
|--|-----------|---------|----------------|-----------------|----------------|--------------------|------------------------|--------|--|------------------|
| Candidate's Name:  |           |         |                |                 |                |                    |                        |        |  |                  |
| Candidate's Signature:   |           |         |                |                 |                |                    |                        |        |  |                  |
| School Name:   |           |         |                |                 |                |                    |                        |        |  |                  |
| District Name:   |           |         |                |                 |                |                    |                        |        |  |                  |
| DO NOT OPEN THIS BOOKLET UNLESS YOU ARE TOLD TO DO SO                |           |         |                |                 |                |                    |                        |        |  |                  |
| Read and follow t  | hese in   | nstruc  | ctions         | carefu          | ılly:          |                    |                        |        |  |                  |
| 1. This paper has two questions and sect                             |           |         |                |                 |                |                    | FOR EXAMINERS USE ONLY |        |  |                  |
| <ul><li>10 printed pages.</li><li>2. Answer all question</li></ul>   |           |         |                |                 | ns <b>A</b> ar | nd -               | QN.<br>NUMBER<br>1 -10 | MARKS  |  | MINER'<br>IITIAL |
| B must be shown in 3. All answers must be                            | e writter | n using | a <b>blu</b> e | e or <b>bla</b> |                |                    | 11 - 20                |        |  |                  |
| point pen or ink. A<br>on graphs and dia                             | •         |         |                | •               | otner tr       | nan                | 21 - 30                |        |  |                  |
| <ul><li>4. No calculators are</li><li>5. Unnecessary chang</li></ul> |           |         |                |                 |                |                    | 31 - 40<br>41 - 43     |        |  |                  |
| cannot easily be re  | •         |         |                |                 | -              | it  <br> -         | 44 - 46                |        |  |                  |
| 6. Do not fill anything <b>EXAMINERS' US</b>                         |           |         |                |                 |                | tion               | 47 - 49<br>50 - 53     |        |  |                  |
| paper.   |           |         |                | 54- 55          |                | Provide the second | 1                      |        |  |                  |
|  |           |         |                |                 |                | -                  | TOTAL                  | (m), ( |  |                  |

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Turn over

## **Section A**

(Questions 1 to 40 carry one mark each)

| 1. | Name <b>one</b> body organ that gets rid of waste materials from the body.      |
|----|---|
| 2. | Name <b>one</b> mammal that has the ability to fly.                             |
| 3. | Mention <b>one</b> way a biological change is different from a chemical change. |
| 4. | How can a banana plant benefit from growing together with a cofffee plantation? |
| 5. | Write the vector that spreads bubonic plague.                                   |
|    | Below is a diagram of a staked tomato. Use it to answer question 6.             |
| 6. | Name the method of staking shown above.   |
|    |   |
| 7. | Give any <b>one</b> use of wearing gloves.                                      |
| 8. | Why is a bean plant grouped under leguminous plants?                            |
| 9. | What is the importance of a forked tongue to a snake?                           |
| 10 | . How does a gecho help in the prevention of malaria in a home?                 |
| 11 | . Mention any <b>one</b> non-communicable disease.                              |
|    |   |

| 12. Whenever it rains, Peter's bicycle fails to climb the hill near his home on his to school. What can he do to stop this problem? | way<br>   |
|---|-----------|
| 13. Name <b>one</b> structure in the human body which helps to connect bones to mus   | <br>cles. |
| 14. Give <b>one</b> way gills in a fish are similar to the moist skin on a frog.  |           |
| 15. How are toadstools, puff bolls, moulds and yeast similar?   |           |
| 16. State one health reason why houses for dwelling should be constructed with doors and windows.                                   | <br>arge  |
| 17. Why should food be mixed with saliva in the mouth?  |           |
| 18. How is a snake useful to human beings?  |           |
| 19. Suggest any <b>one</b> use of crutches in first aid.  |           |
| 20. State any <b>one</b> way in which soil is useful to man.  |           |
| 21. What system is responsible for the movement of blood around the body?   |           |
| 22. State any <b>one</b> result of using old wires for carrying current from one place another.                                     | <br>;e to |
| 23. Give the function of the liver in digestion of food.  |           |
| 24. Write down the type of leaf shown in the diagram below.   |           |
|   |           |

| 25.<br>- | State the organism that can be controlled by the use of antibiotics.                       |
|----------|--|
|          | Write down any <b>one</b> piece of advice you can give a family to promote family hygiene. |
| 27.      | Why is drug prescription important to patients?  |
| 28.      | How does smearing of the floor and sweeping prevent jiggers?                               |
| 29.<br>- | State the function of tears in the eyes.   |
| 30.      | Which type of electricity is produced by dry cells?  |
| 31.      | Give <b>one</b> sign of kwarshiorkor in children.  |
| 32.      | How is SYFA useful in our community?   |
| 33.      | What process makes dew, mist and fog to form during the night?                             |
| 34.      | Give <b>one</b> use of dogs in a home.   |
| 35.      | How is the sun useful in the water cycle?  |
|          | Besides coal and petrol, name one natural resource from underground used as fuel.          |
| 37.      | In the space below, draw a compound fracture.  |

| 38. | Give        | a reason why sound does not travel in a vacuum.                          |
|-----|-------------|--|
| 39. | Why         | is it easier to control diarrhoea than controlling malaria?              |
| 40. | State       | one intestinal worm that enters the body through the skin.               |
| 41. | . The       | SECTION B  diagram below shows a poultry management practice. Use it to  |
|     |             | er questions that follow.  |
|     |             |  |
|     | a)          | What name is given to the farm management practice shown above?          |
|     | b)          | State any <b>one</b> common vice controlled by the practice shown above. |
|     | c)          | Give <b>one</b> cause of vices in poultry.                               |
|     | d)          | Give any <b>one</b> effect of poultry vices.                             |
| 42. | (a)         | Apart from the skin and lungs, give one other body organ.                |
|     | (b)<br>(i)  | List any <b>two</b> diseases that affect the skin.                       |
|     | (ii)<br>(c) | Give <b>one</b> way of caring for the skin.                              |
| 43. | (a)<br>(i)  | Suggest any <b>two</b> reasons why farmers rotate their crops.           |
|     | (ii)        |  |

|             | diagram below is of an organism. Use it to answer the question to follow.  M  Q  Z |
|-------------|--|
| (a)         | What kind of organism is shown above?  |
| (b)         | Give the importance of part <b>Q</b> to the above organism.                        |
| (c)         | How is this organism able to reproduce itself?                                     |
| (d)         | Name the structure indicated by letter <b>M</b> .                                  |
| (a)         | What is blood pressure?  |
| (b)         | Name <b>one</b> component of the solid part of blood.                              |
| (c)<br>(i)  | Give <b>two</b> uses of blood to verterbrate animals.                              |
| (ii)<br>(a) | Why is a pulley called a simple machine?   |
| (b)         | How can we improve the efficiency of a pulley?                                     |

## 47. (a) How does the instrument below produce sound?

| (b)   | How can the pitch of the instrument be changed?                             |
|-------|---|
| (c)   | To which class of musical instruments does it belong?                       |
| (d)   | Name <b>one</b> other instrument in the same class as the above instrument. |
| (a) W | Where does gaseous exchange take place in the human lungs?                  |

- (b) Why is the trachea made of rings of cartilage?
- (c) How is food prevented from entering the lungs during swallowing?
- (d) Give **one** property of air we breathe out.

## 49. <u>The table below shows weather instruments. Match the items in A with</u> those in B.

| List A                        | List B  |
|-------------------------------|---|
| Wind sock                     | atmospheric pressure                          |
| Minimum & Maximum thermometer | speed of wind                                 |
| Barometer                     | strength of wind                              |
| Anemometer                    | lowest and highest termperatures for the day. |

(a) Wind sock\_

48.

- (b) Minimum and maximum thermometer
- (c) Barometer \_\_\_\_\_
- (d) Anemometer

| 50.   | (a)         | What is an accident?   |
|-------|-------------|--|
|       | (b)<br>(i)  | List any <b>two</b> forms of accident one can get on the way to school.  |
|       | (ii)<br>(c) | Suggest <b>one</b> way of preventing accidents on the road.  |
| 51.   | Ther<br>(a) | e are <b>four</b> types of teeth in human beings.  Draw and name the type of teeth used for cutting and biting food.(2marks) |
|       | (b)         | How does regular brushing of teeth prevent tooth decay?  |
|       | (c)         | Name the food element responsible for the formation of strong bones and teeth.   |
| 52.   |             | (a) Name <b>one</b> eye defect common in man.  |
|       | (b)         | State the cause of the defect you have named in (a) above.   |
|       | (c)         | How can eye defects be prevented?  |
|       | (d)         | Give <b>one</b> common eye disease spread by vectors.  |
| 53. ( | (a)         | ABC is a way of controlling the spread of germs that cause AIDS. What does C stand for?                                      |

|     | (b)                  | Name the germ that causes AIDS.  |
|-----|----------------------|--|
|     | (c)<br>(i)           | Give <b>two</b> groups of people vulnerable to AIDS by nature of their work.   |
|     |                      | iagram below shows a method of making a temporary magnet. d use it to answer questions 25 and 26   |
|     |                      | Bar magnet-  |
|     | a) Na                | ame the method of making magnets shown above.  |
|     | b) W                 | /hat will be the pole at P after magnetization?  |
|     | (c) G<br>(i)<br>(ii) | Sive any <b>two</b> ways of demagnetising magnets.   |
| 55. | a) (i) b)            | Name the parts marked <b>K</b> and <b>N</b> State the energy change that takes place at <b>K</b> when <b>M</b> is closed.  Give any <b>one</b> form of energy produces at K when M is closed |
|     |                      | Good lunk  |

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#### P.7 SCIENCE PLE- MOCK SET VII MARKING GUIDE

- 1. The skin/liver/lungs/kidneys
- 2. Bats
- Biological change causes increase in size while chemical changes cause changes in size/Biological changes occur in living organisms wile chemical change occurs in both living and non living things.
- 4. Bananas get shade from coffee trees/get manure when the fallen leaves of coffee rot/Bananas control soil erosion by scattering rain drops.
- 5. Training
- 6. Culex mosquito.
- 7. To protect the hands from: injury by heat/sharp objects/scalds/getting blisters/germs/getting dirty.
- 8. Has a root nodule on its roots.
- 9. For detecting smell/vibrations in air/feeling.
- 10. Gechos eat mosquitoes that hide in the house.
- 11. Cancer/Asthma/accept any deficiency disease/eye defects.
- 12. He should buy new tyres/pour marram on the road.
- 13. Tendons.
- 14. Both help in breathing/gaseous exchange.
- 15. They have no chlorohyll/feed saprophytically/do not make their own food. Reject: Reproduce by means of spores because of yeast.
- 16. To allow free circulation of air in the house/allow gaseous exchange in the house/allow light into the house.
- 17. For easy swallowing/to start the process of starch digestion.
- 18. Source of food/control pests like rats and mice/source of snake venom for making anti venom.
- To prevent further injury/to immobilize the injured part/to reduce weight on the injured limb.
- 20. For growing crops/construction/making bricks/blocks/making local herbs.
- 21. Circulatory system.
- 22. May lead to short circuits/may lead to fire outbreaks.
- 23. Deamination of fats/detoxicates the body/produces bile.

- 24. Simple leaf.
- 25. Germs/pathogens/bacteria
- 26. Washing hands/utensils/cooking from clean place/Sweeping the compound/proper disposal of waste/digging pit latrines/rubbish pits.
- 27. Prevents overdose/under dose/drug poisoning.
- 28. Prevents the breeding of jiggers/seals cracks/gets rid of dust.
- 29. Lubricates the eyes/prevents eyeballs from drying/prevents friction in the eyes.
- 30. Chemical electricity.
- 31. Swollen pot belly/curly brown hair/dry scale skin/swollen joints, emaciated muscles.
- 32. Helps youth guard against AIDS/sensitizes the youth on AIDS.
- 33. Condensation.
- 34. Protection from thieves/guards the home/used for hunting/as pets/controls rats.
- 35. Heats water bodies to cause evaporation/results in evaporation.
- 36. Natural gas/uranium/peat/diesel/ kerosene
- 37.
- 38. Vacuum has no medium of sound transfer/No molecules of matter for heat transfer.
- Diarrhea can be controlled by maintaining proper personal hygiene but controlling mosquitoes and mosquito bites is difficult.
- 40. Bilharzias flukes/Hookworms.

#### **Section B**

- 41.
- (a) Debeaking
- (b) Egg eating/ feather pecking/ cannibalism/ toe pecking
- (c) Insufficient feeds/boredom
- (d) It is expensive to buy.
- 42. -
- (a) Heart/brain/intestines/ears/eyes/nose.
- (b) Eczema/scabies/measles/skin cancer/ring worms.

(c) Bathing regularly/Eating balanced diet/applying body lotion that keeps it soft/Avoid piercing, tattooing or bleaching it.

43.

- (a) Increase crop yields/prevent crop diseases/pests/to maintain soil fertility.
- (b) Mulching/adding manure/fertilizers/bush fallowing/agro-forestry/mixed farming.

44. -

- (a) Mushroom/Toadstool/ a fungus
- (b) To produce and store the spores.
- (c) By means of spores/Spore formation
- (d) Mycelline/hyphae.

45. -

- (a) The liquid part of blood.
- (b) Red blood cells/white blood cells/platelets/
- (c) Transport hormones/waste materials/heat/oxygen/helps in clotting on wounds/defends the body against germs.

46. -

- (a) Has few component parts/does not need much skill to use.
- (b) Increasing the number of pulleys in the block/oiling the movable parts.

(c) 
$$E = \frac{L}{MA} / E = \frac{100kg}{2} / 50kgf$$

47. -

- (a) By vibration of air in the column.
- (b) Closing some of the holes when blowing the instrument.
- (c) Wind instruments
- (d) Trumpet/whistle/horn/tromboneba njo/flute/read pipe.

48. -

- (a) Alveoli/air sacks
- (b) To keep it open all the time/prevent it from collapsing or closing.
- (c) The trachea is closed by the epiglottis.
- (d) It is warm/moist/has more carbon dioxide than oxygen.

49. -

- (a) Strength of wind.
- (b) Lowest and highest temperatures of the day.
- (c) Atmospheric pressure.

(d) Speed of wind.

50. -

- (a) A sudden happening or event that often causes harm to the body.
- (b) Snake bites/motor accidents/falling down/being kidnapped.
- (c) Following traffic signs/crossing roads from pedestrian crossings/where there are traffic guides/avoid playing on the road.

51. -

- (a) Drawing of Incisor tooth.
- (b) Removes food remain/stains that attract bacteria.
- (c) Calcium.

52. -

Myopia (short-sight)/long sight (Hypermetropia)/catarracts/ night blindness Short eyeball/thick eye lens/long eyeball/thin eye lens/lack of vitamin A in the diet/rough cornea.

Wearing glass with concave lens/converse lens/cylindrical lens/eating food rich in vitamin A.

Trachoma/conjunctivitis

53.

- (a) Condoms (Reject: Use of condoms)
- (b) Human immuno deficiency virus/HIV
- (c) Long distance truck drives/soldiers/policemen/sex workers/business men.

54. -

- (a) Induction method.
- (b) South pole
- (c) Repeated dropping/strong heating/making it rust/poor storage/repeated hammering.

55. -

- (a) bulb
- (b) mechanical/electrical-heat light
- (c) Heat/light energy
- (d) 1cell = 1.5V/2cells = (2x1.5V)= 3.0 volts.