# ASSOCIATION OF DIRECTORS OF PRIVATE SCHOOLS AND INSTITUTIONS (ADPSI)

#### NYENDO MUKUNGWE DIVISION - MASAKA CITY

### PRE-PLE SET I 2020

#### **INTEGRATED SCIENCE**

Time allowed: 2 Hours 15 Minutes

PERSONAL NO.

Index No.									
Candidate's Name:									
Candidate's Signature:									
EMIS Number:									
District:							 	 	 

## Read the following instructions carefully:

EMIS NO.

- 1. This paper has **two** Sections: **A** and **B**.
- 2. Section **A**, has **40** questions (40 marks)
- 3. Section **B** has **15** questions (60 marks).
- 4. Answer **ALL** questions: All answers to both Sections **A** and **B** must be written in spaces provided in full sentences.
- 5. All answers must be written using a blue or black ballpoint pen or ink but not pencil. All work done in pencil except diagrams will **NOT** be marked.
- 6. Unnecessary alteration of work will lead to loss of marks.
- 7. Any handwriting that cannot easily be read, may lead to loss marks.
- 8. Do **not** fill anything in the boxes indicated:

SECTION	EXAMINER'S MARKS	T/L MARKS
A		
В		
TOTAL		

"For Examiners' Use Only

FOR EXAMINERS' USE ONLY				
QN. NO.	MARK	SIGN		
1-10				
11-20				
21-30				
31-40				
41-50				
51				
52				
53				
54				
55				
TOTAL				

## **SECTION: A (40MARKS)**

1.	Mention one breed of rabbits.
2.	Give one example of a non flowering plant which reproduces by means of seeds.
3.	Which excretory organ removes gaseous wastes from the body?
4.	State one reason why some objects float on water.
5.	Mention one way of keeping boiled water clean.
6.	Write the agent of sheet erosion.
7.	State one danger of leaving direct sunshine to enter into a bee hive.
8.	Why is synovial fluid compared to lubricating oil used in vehicles?
qı	ne diagram below shows sitting posture of two pupils. Use it to answer uestions 9 and 10.  A  B  Which of the two sitting posture shows bad posture?
9.	which of the two sitting posture shows bad posture?
10.	Mention one danger of the posture you have written in question 10 above.
11.	Give one example of a living resource in the environment.

12.	Which class of simple machines works in the covering and opening of a plastic bottle with its lid?
13.	Write one form of energy involved in the production of solar electricity.
14.	Mention any one factor considered by farmers as they choose a variety of tuber crops to grow.
15.	What advice can you give a mother whose child has put a small stone in the nose?
16.	Name the malnutritional disease that affects eyes in humans.
17.	Why should the inside of a pinhole camera be painted black?
18.	Which term refers to the upward movement of liquids through a narrow space?
	diagram below shows an instrument used to measure weight. Use it to wer questions 19 and 20.
19.	Name the instrument shown above.
20.	Which force helps in the working of the instrument above?

21.	How do school children protect their teeth from toothdecay?
22.	Why do veins have thin walls?
23.	Name the gas produced by burning tobacco in a cigarette.
24.	Why is vasectomy not commonly used as a birth control method?
25.	State one way of controlling soil erosion in the school compound.
26.	Which type of latrine is recommended for little children?
27.	Why is a cockroach grouped under arthropods?
28.	Mention one reason why yeast is used in bread making.
	diagram below shows production of electricity on a bicycle. Use it to wer questions 29 and 30. head lamp
	P
29.	Name the device marked <b>P</b> .
30.	How can a bicycle rider make the head lamp to produce more light?
31.	Which type of teeth is absent in the milk set of teeth?

	SECTION :B ( 60 marks)
40.	State the role of heat in the experiment shown above.
39.	What was the experiment testing about soil?
	water droplets  dry lump of soil
	lid————————————————————————————————————
	diagram below shows an experiment carried out on soil by a primary five s. Use it to answer questions 39 and 40.
38.	Write the type of mirror which has a flat smooth surface.
37.	Which part of fish has the same function as that of the human ear?
36.	Why are pregnant mothers given iron tables to take daily?
35.	Mention one natural form of static electricity.
34.	Which type of breathing causes the ribcage to move upwards and outwards?
JJ.	realise the type of poultry confinionly kept for large scale egg production.
33	Name the type of poultry commonly kept for large scale egg production.
32.	How can you tell by looking at a plant that it is a dicotyledonous plant?

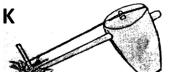
41. Give any two examples of chemical and physical changes.

	(a) chemical changes
	(i)(ii)
	(b) physical changes
	(i)(ii)
42.	(a) Mention the type of shadow formed from (a).  (i) small source of light
	(ii) big sources of light
	(b) State two factors which affect the size of shadows formed.  (i)
43.	(ii)(a) Write two ways in which men in our community may be vulnerable.  (i)
	(ii)
	(b) Give two ways of caring for men when they are in a vulnerable state.
	(i)
	(ii)
44.	The diagram below shows methods of harvesting crops. Use it to answer questions that follow.  L  N  M
	re-examined with Carriscanner

(a	a) Name the methods of harvesting marked <b>L</b> and <b>U</b> .
	(i) L (ii) U
	(b) State one disadvantage of harvesting crops using method marked ${\bf N}.$
	(c) Why is the dry season the best time for harvesting crops?
45.	(a) Which process in flowering plants follows pollination?
	(b) Name the part of a flower which becomes a fruit after pollination.
	(c) Give two ways in which a fruit is important to a plant.
	(i)
	(ii)
46.	(a) Name the type of thermometer which is reset after use by;
	(i) shaking
	(ii) using a magnet
	(b) Mention two reasons why mercury is commonly used in thermometers.
	(i)
	(ii)
47.	(a) Name the fossil fuel which is in form of:
Τ/.	(i) solid (ii) gas
	(iii) liquid
	(b) State one way of conserving fossil fuels in the environment.
48.	The diagram below shows musical instruments. Use it to answer questions that follow.

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	(a)	Identify two musical instruments in the diagram above which can be grouped together.
		(i)(ii)
	(b)	Give a reason for grouping the musical instruments in (a) above together.
	(c)	How does the musical instrument marked J produce sound?
49.		te two ways in which fungi are: useful to people
		(i)
		(ii)
	(b)	harmful to people
	(	i)
	(	ii)
50.	Use <b>FR</b> (	the list of animals below to answer questions that follow.  OG , EAGLE , SPINY ANTEATER, CROCODILE
	(a)	Identify a reptile from the list above.
	(b)	Which class of vertebrates is not represented in the list above?
		Give one way in which the reproduction of a frog and spiny anteater are: (i) similar
	(	(ii) different
51.	(a)	Which organ of the human body works as a:
		(i) temporary store of urine?
		(ii) sense organ for touch?

	(b)	State two ways of keeping the human body healthy.
		(i)
		(ii)
52.		e diagram below shows two forms of first aid. Use it to answer estions that follow.
		X Y
	(a)	Name the first aid materials mark X and Y.
		(i) X (ii) Y
	(b)	Why should a stretcher be used on the casualty with a first aid material marked Y but not the one with X?
	(c)	Give one importance of giving first aid to casualties.
53.	(a)	Name one state of matter.
	(b)	Mention any two properties of matter.  (i)
		(ii)
	(c)	Why is a piece of paper called matter?
54.	(a)	Mention one example of natural fertilisers.
	(b)	Give one method of applying fertilisers in the garden.

	(c)	Write any two advantages of using natural fertilisers.
		(i)
		(ii)
55.	(a)	Mention one disease in people:
		(i) caused by smoking
		(ii) worsened by smoking
	(b)	State two dangers of smoking to an individual.
		(i)
		(ii)

## **End( MARKING GUIDE NEXT PAGE)**

## MARKING GUIDE INTEGRATED SCIENCE

#### **Section A**

- 1. Angora rabbits // chinchilla rabbits // Californian // Rex // Earlops // Newzealand white rabbits
- 2. pine // cedar // cypress // ginkgo // podo // spruce // fir // cycads
- 3. lungs
- 4. Some objects are less dense than water // Some objects have the same density with water.
- 5. Keeping water in clean containers // Covering water well // Using clean containers to draw water
- 6. Wind
- 7. It causes swarming
- 8. Both reduce friction
- 9. A
- 10. Causes back pain // Causes deformation of bones
- 11. Plants // animals
- 12. Screws
- 13. Heat energy // light energy
- 14. When it has good yield // resistant to diseases // grows well in their area // takes short time to mature // tastes well // has good market
- 15. To take her child to the nearest health unit.
- 16. Night blindness
- 17. To prevent internal reflection / reflection
- 18. Capillarity
- 19. Spring balance
- 20. Force of gravity // gravitational force
- 21. Regular brushing of teeth // Rinsing of their mouth after every meal // Reducing on sugary foods eaten // going for regular dental check up // regular dental flossing
- 22. Veins carry blood at a low pressure

- 23. Carbon monoxide
- 24. It is expensive // It is painful // It involves surgical operation // It is irreversible /permanent
- 25. Planting short grass // planting trees
- 26. Potties
- 27. A cockroach has a segmented body and jointed legs
- 28. To increase the size of bread
- 29. Dynamo / bicycle dynamo
- 30. By riding faster / increasing the rate of pedalling
- 31. Molar teeth
- 32. When it has network leaf venation // when it has tap root system // when its cotyledons come out of the ground during germination
- 33. Chickens/ reject layers
- 34. Breathing in // inhalation // inspiration
- 35. Lightning
- 36. To increase the volume of blood in their bodies // to enable their bodies produce more / enough blood.
- 37. Lateral line
- 38. Plane mirror
- 39. Soil contains water/moisture // water is a component of soil
- 40. To cause evaporation of water in the soil.

#### **Section B**

- 41. (a) rusting // rotting // weathering // digestion // boiling of an egg // respiration
  - (b) freezing // melting // condensation // evaporation // cracking of an egg // grinding of grains into flour
- 42. (a) i) umbra shadow ii) penumbra shadow
  - (b) Size of the opaque object // distance of the opaque object from the source of light // Size of the source of light
- 43. (a) when they are sick // elderly
  - (b) Taking them to the hospital // reminding them to take medicine // washing for them // showing them love etc
- 44. (a)i) L cutting ii) M hand picking / picking
  - (b) Some tubers remain in the soil // It needs a lot of effort to uproot the plant // Some tubers may be damaged when they break // It only works well in the rainy season when the soil is soft
  - (c) There is plenty / enough sunshine to dry harvested crops
- 45. (a) fertilisation
  - (b) ovary
  - (c) A fruit protects seeds // A fruit helps in seed dispersal
- 46. (a) i) clinical thermometer ii) Six's thermometer

(maximum and minimum thermometer)

- (b) Mercury is opaque hence easily seen // It has a uniform expansion // It does not wet the glass walls
- 47. (a) i) coal ii) natural gas iii) petroleum / crude oil
- 48. (b)Using them sparingly // Using alternative sources of energy other than fossil fuels // sensitising people about the dangers of uncontrolled mining of fossil fuels // enforcing strict laws against uncontrolled mining of fossil fuels
  - 49. (a) Some fungi are eaten as food // used for bread making // used in fermentation of alcohol // used to make medicine
    - (b) Some fungi are poisonous when eaten // cause diseases // make food to go bad
  - 50. (a) crocodile
    - (b) fish

- (c) i) Both lay eggs / reproduce by laying eggs
  - ii) A frog undergoes external fertilisation while a crocodile undergoes internal fertilisation
- 51. (a) i) urinary bladder
- ii) skin
- (b) Feeding on a balanced diet // Doing regular physical exercises // Going for regular medical checkup //Having enough rest always
- 52. (a)i) X sling / armsling
- ii) Y splint
- (b) The casualty with Y is unable to walk while that with X can walk.
- (c) Firstaid saves life // promotes quick recovery // reduces pain // prevents further injuries // stops external bleeding
- 53. (a) liquids // gases // solids
  - (b) matter occupies space // has weight // exerts pressure
  - (c) A piece of paper occupies space and has weight
- 54. (a) Farm yard manure // green manure // compost manure
  - (b) Top dressing // broadcasting // spraying // placement
  - (c) Natural fertilisers are cheap // easy to get // take long in the soil // do not pollute the soil // improve soil structure // do not require special skills to apply
- 55. (a) i) lung cancer // emphysema
  - ii) tuberculosis // bronchitis // asthma // whooping cough / (pertussis )// diphtheria
  - (b) smoking causes lung cancer // emphysema // smoking worsens respiratory diseases // damages the lungs // stains the teeth // causes throat cancer