

**FINAL OFFICIAL MARKING GUIDE PLE INTEGRATED SCIENCE 2023**  
**AS DEVELOPED BY TEACHERS OF TEACH & LEARN SCIENCE PLATFORM**

SECTION A (40 MARKS)					
NO.	CORRECT RESPONSE/ANSWER	COMMON WRONG RESPONSE(S) & COMMENT	THEME	TOPIC & CLASS WHERE IT IS TAUGHT	
1	Molar teeth / Molars	<i>Wisdom teeth/permanent teeth.</i> <b>Comment:</b> Wisdom teeth/permanent teeth <b>are not</b> types of teeth.	THB	The teeth, P.4	C
2	It reduces the hiding places/hiding ground for pests. // Eases management of diseases by spraying with chemicals. // Gives crops more strength to fight against diseases.		SHAO	Crop growing, P.4	A
3	Sunshine // Rainfall		TE	Weather in our Env't, P.3/4	C
4	Helps to remove water from the lungs of the victim. // To remove water from the lungs and the stomach.		HH	Accidents and first aid, P.6	C
5	Fish have gills for breathing in water. // Fish take in dissolved oxygen in water.	<i>Any other characteristic of fish other than those.</i>	WOLT	Classification P6	C
6	Deworming/Drenching // Artificial insemination // Ear tagging/Ear Notching // Branding // Castration // Dehorning // Drenching // Spraying with acaricides // Pregnancy diagnosis // Vaccination // Treatment of sick animals.	<i>Milking</i>	SHAO	Cattle keeping P.6	C
7	It restricts the movements of the animal. // It prevents animal from running away.		SHAO	Cattle keeping, P.6	C
8	Lungs / The lungs		THB	Excretory system P.6	K
9	Both feed heterophytically. / Both feed on already made food. // Both fungi and animals cannot make their own food.		WOLT	Bacteria and Fungi. P.5	C
10	Screen traps and kills houseflies. // Screen traps and kills houseflies that would transmit diarrheal diseases.	<i>Screen traps houseflies.</i> <b>Comment:</b> Trapping & killing <b>are key marking points</b> here.	HH	Sanitation, P.6	C

11	To chew food properly/thoroughly before swallowing. // To eat small lumps of food at a time. // To always drink water after eating food. // To avoid over-eating.		THB	The Digestive system, P.5	A
12	By avoiding bad peer groups. // Making oneself busy with productive activities. // By making right decisions. // By joining good social groups // By joining football clubs.		HH	Alcohol, smoking and drugs in society, P.6	C
13	Aluminium is light. // Aluminium is a good conductor of heat. // Aluminium does not rust easily.	<i>Aluminium is cheap // Aluminium is available.</i>	ME	Heat Energy, P.5	C
14	Soap removes dirt from clothes. // Soap removes stains from clothes. // Soap loosens / dissolves dirt in clothes.		SHAO	Science at home and our community, P.4	C
15	Swamp drainage. // Construction of houses in wetlands. // Construction of industries in wetlands. // Growing crops in wetlands.	<i>Deforestation</i>	TE	Components of the Env't (Soil), P.5	C
16	Vomiting // Anaemia // Skin rash // Diarrhea // Loss of appetite // Fatigue		HH	Communicable intestinal diseases & worm infestations, P.4/P.5/P.6.	K
17	To let in air that supports burning. // To remove ash.		ME	Heat energy	C
18	To retain/conserve heat. / For the stove to keep heat longer.		ME	Heat energy	C
19	It leads to bad smell in the house. // Animals contaminate utensils. // Leads to easy spread of diseases. // May lead to suffocation due to stiff competition for oxygen.		HH	Vectors & Diseases, P.4	K
20	The use of biogas reduces on rate of deforestation. // Biogas does not pollute the environment.		TE	Energy resources in the Env't, P.7	C
21	Light is obstructed and shadows are formed. / Shadows are formed.		ME	Light energy, P.7	C
22	For making wax crayons. // For making paint. // For making shoe polish. // For making vanish.		SHAO	Keeping poultry & Bees, P.5	K
23	To promote food security. // For future use. // To prevent food wastage.		SHAO	Crop growing, P.5	C
24	Force of gravity/Gravitational force. // Friction /Force of friction // Tensional force/Tension		ME	Simple machines and friction, P.7	K
25	The mask prevents airborne germs from entering the body. // It prevents dust from entering the lungs. // It prevents smoke from damaging the lungs.		THB	The respiratory system, P.6	C
26	Scent // Nectar // Pollen		WOLT	Classification of plants/ Plant life, P.6/P.4	K

27	By cleaning them after use. // Repainting them. // Oiling the moving parts. // Keeping them in dry clean places when not in use. // Making them perform their right duties. // Using them correctly.		ME	Simple machines and friction, P.7	A
28	It helps to remember/tell/know the next date of immunization. // It helps to monitor the growth of the child.		HH	Immunization, P.5	C
29	Length of the string // Size of vibrating surface/object // Thickness of the vibrating surface. // Frequency//Tension of vibrating surface.		ME	Sound Energy, P.6	C
30	The mouth // Teeth // Hair // Fingernails.		HH	PHC	K
31	For fastening things/materials together. // For lifting heavy items during repair.		ME	Simple machines and friction, P.7	C
32	To avoid boredom among birds. // To keep birds busy. // To enable birds to do physical exercises.		SHAO	Keeping poultry and bees, P.5	C
33	Food has a bad smell. // Food has a stale taste/bad taste. // Food becomes sticky. // Colour of food changes.		HH	Keeping Poultry and bees, P.5	C
34	Pieces of paper are attracted by the plastic pen. / It attracts pieces of paper.		ME	Electricity & Magnetism, P.7	A
35	For producing electricity. / For producing electrical energy.		ME	<i>Electricity &amp; magnetism, P.7</i>	C
36	Glass is not a conductor of electricity. / Glass is a poor conductor of electricity.		ME	<i>Electricity &amp; magnetism, P.7</i>	C
37	At the wrist // At the ankle		HB	Musculo-skeletal system, P.7	C
38	Controls pests. // Reduces transpiration. // Reduces weight of a plant. // Ensures high and quality yields.		TE	Interdependence of things in the environment, P.7	C
39	Fencing around water sources. // Planting trees around water sources. // Slashing/weeding around water sources. // Sensitizing people to ensure proper disposal of wastes.		TE	PHC	A
40	HIV/AIDS lowers the immunity of a victim. // It destroys white blood cells.		HH	The Reproductive System.	C

SECTION B (60 MARKS)					
<b>41</b> <b>a)</b>	Rusting weakens iron sheets. // Rusting changes the colour of iron sheets. // Rusting makes holes in iron sheets. // Makes iron sheets become old quickly.		MCE	Types of changes, P.5	A
<b>b)</b>	By painting iron sheets. // By galvanizing iron sheets. // Keeping iron sheets in a (cool) dry place.				
<b>42</b> <b>.a)</b>	Health records		SHAO	Keeping goats, sheep & pigs, P.5	C
<b>b)</b>	Brucellosis // Mastitis // Tuberculosis // Rinderpest // Foot and mouth disease // Pneumonia.				
<b>c)</b>	Helps the farmer to monitor health of animals on the farm. // Helps the farmer to know the medical expenses on the farm. // Helps the farmer to plan for medical activities on the farm. // Helps to know the drug and dosage previously given. // Helps the farmer to know diseases that commonly attack his farm				
<b>43</b> <b>a)</b>	Gully erosion / Gulley erosion	<i>Sheet erosion</i>	TE	Soil, P.5	C
<b>b)</b>	It leads to destruction of people's property. // It damages the soil structure. // It leads to silting of water bodies. // It leads to death of soil organisms. // Erodes humus leading to soil infertility. / It leads to soil exhaustion. // Leads to pollution of water sources.				
<b>c)</b>	It leaves the soil bare which exposes it to agents of soil erosion.				
<b>44</b> <b>a)</b>	Node	<i>Lateral bud / Axillary bud</i> <b>Comment:</b> <i>Axillary/lateral bud emerges from the node.</i>	SHAO	Crop growing, P.5, P.6	C
<b>b)</b>	Stem cuttings	<i>Stem cutting</i>			
<b>c)</b>	Both develop into new plants. // Both grow into new shoots.				
<b>d)</b>	It has axillary buds which develop into a new plant during propagation. // It stores and supplies food to the growing embryo during propagation.				
<b>45</b> <b>a)</b>	These are groups of people whose health can easily get harmed and need special health care and diet.		HH	Food & Nutrition, P.5	C
<b>b)</b>	Expectant mothers // The sick (The invalids / The convalescent) // The weaned babies // Babies // Breast feeding mothers // The elderly.				
<b>c)</b>	Taking the sick to hospital for medication. // Giving the sick medicine. // Giving the sick food. // Reminding the sick of the next				

	visit to a health Centre. // Washing them clothes. // Building them shelter. // Cutting their fingernails short. // Combing their hair.				
<b>46 a)</b>	Measuring cylinder		ME	Measurements, P.5	A
<b>b)</b>	For immersing/lowering/placing the irregular object gently in water. / It prevents splashing of water during immersion of the irregular object in water.				
<b>46 c)</b>	<ul style="list-style-type: none"> <li>- Moses will lower the irregular object into the overflow can containing water up to the level of the spout.</li> <li>- Moses will then record the level of the displaced water in the measuring.</li> <li>- The volume of the displaced water in the measuring cylinder is equal to the volume of the irregular object.</li> </ul> <p><b>OR:</b></p> <ul style="list-style-type: none"> <li>- Moses should fill the overflow can with water and lower the irregular object into it.</li> <li>- Collect the water displaced in a measuring cylinder and read its level. That will be the volume of the irregular object.</li> </ul>				
<b>47 a)</b>	Development of pimples in the face. // Development of breasts. // Menstruation (ovulation) starts. // Softening of their voices. // Enlargement and rounding of hips occur. // Growth of pubic hair under armpits. // Sweat glands become more active. // Development of the uterus. // Growth of pubic hair.		THB	Reproductive system	A
<b>47 b)</b>	Abstaining from sex until marriage. // Encouraging girls to avoid bad peer groups/Resisting peer pressure. // Encouraging girls to avoid watching pornographic movies. // Encouraging girls to attend health seminars. // Teaching girls the dangers of early pregnancies. // Campaigning against early sex and early marriages. // Teaching girls on proper use of leisure. // Boys should avoid gifts for sex from girls. // Encouraging girls to join productive groups.				
<b>47 c)</b>	Wearing clean, dry underwears/Changing underpants after bathing. // Abstaining from sex. // Using condoms when having sexual intercourse with non-marital partners. // Shaving pubic hair around pubes. // Going for reproductive system medical checkups. // Feeding on balanced diet. // Girls should wear sanitary pads during menstruation. // Treating all Sexually Transmitted Infections early. // Avoid wearing tight pants/knickers. // Doing regular physical exercises. // Bathing sexual organs regularly. // Bathing regularly.				

<b>48 a)</b>	Swimming birds.		WOLT	<i>Classification of animals, P.6</i>	C
<b>b)</b>	<b>i)</b> <b>Foot</b> is fully webbed for paddling in water / for easy movement/swimming in water without sinking. / Helps swimming birds to paddle in water. <b>ii)</b> <b>Beak</b> is spoon-shaped for sieving/catching/filtering of food from water/mud.				
<b>c)</b>	Geese // Ducks				
<b>49 ai)</b>	It helps to prevent deficiency diseases. // It encourages people to feed well.				C
<b>49 aii)</b>	It helps to reduce infant deaths. // It reduces maternal deaths. // It encourages pregnant women to go for antenatal care services.		HH	PHC, P.5	
<b>49 b)</b>	Through community workshops and seminars. // Through school health programs. // Through health fairs. // Through music. // Through drama. // Through radio and television talk-shows. //Through village health meetings.				
<b>50 a)</b>	Broadcasting method		SHAO	<i>Crop growing, P.5</i>	C
<b>b)</b>	Makes weeding easy. // Reduces competition for nutrients and sunlight among crops. // Makes spraying crops with pesticides easy. // Makes harvesting easy.				
<b>c)</b>	Chemicals are poisonous to farmers. // Chemicals are poisonous to farm animals. // Chemicals pollute the soil.	<i>Chemicals destroy crops.</i> <b>Comment:</b> that is due to negligence.			
<b>51 ai)</b>	Evaporation		HH	<i>Alcohol, smoking &amp; drugs in society, P.6</i>	C
<b>ii)</b>	Condensation				
<b>b)</b>	To prevent escape of vapour. / To prevent alcohol vapour from escaping. // To direct alcohol vapour into the cold water.				
<b>c)</b>	To transport alcohol vapour to be condensed in the container having cold water. // To transport condensed distilled alcohol to the collecting bottle.				
<b>52 a)</b>	Easy/fast spread of diseases. // Poor sanitation // Poor water supplies. // Inadequate/poor food supplies..		CPFL	<i>Population &amp; Health, P.7</i>	C
<b>b)</b>	Helps in (Aids) proper planning for the population. // Ensures proper provision of health services to the population.				
<b>53 a)</b>	Plants provide oxygen that supports human life through photosynthesis. // Some plants provide food that supports human		TE		A

	life. // Some plants provide herbal medicine that supports human life. // Plants filter the air that people breathe/ Plants purify air by absorbing carbon dioxide.			Interdependence of things in the Env't, P.7	
b)	By practicing agroforestry // By afforestation // Using energy-saving stoves // Using solar energy.				
54 a)	It feeds on human blood for development of its eggs. // It has a sharp proboscis for sucking blood and injecting the plasmodium germ into the host. // Plasmodium germ survives in its abdomen.		HH	Disease vectors, communicable diseases & worm infestations.	C
b)	i) Pouring oil on stagnant water cuts-off oxygen supply to the larvae of female anopheles mosquito. // It suffocates and kills the larvae of female anopheles mosquito. ii) Sleeping under mosquito nets prevents mosquito bites.				
55 a)	White blood cells / Leucocytes		THB	The circulatory System	C
b)	W-To carry oxygen to all parts of the body. /To carry oxygen round the body.	<i>To carry oxygen <u>around</u> the body.</i>			
c)	To fight against germs/pathogens. // To defend the body against germs/infections.				
d)	Sickle Cell anaemia / Sickle cells				

### KEY TO ABBREVIATIONS USED FOR THEMES

**MCE:** MANAGING CHANGES IN OUR ENV'T; **ME:** MATTER & ENERGY; **TE:** THE ENVIRONMENT; **HH:** HUMAN HEALTH; **THB:** THE HUMAN BODY; **SHAO:** SCIENCE IN HUMAN ACTIVITIES AND OCCUPATIONS; **WOLT:** WORLD OF LIVING THINGS; **CPFL:** COMMUNITY, POPULATIONS AND FAMILY LIFE

### DISCLAIMER:

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13	EMOIT FREDRICK	BRIGHT JR SCH, MAKERERE	0771321345
14	AYIKO JAMES	ST. JOSEPH BUSUKUMA P/S	0776272833
15	AYIKO STEPHEN	UGANDA MARTYRS P/S, LUBAGA	0782243576
16	OUNI EMMANUEL	ST. NOAH JR. SCH. ZZANA	0775001637
17	KAKURU JOHN	BRIGHT FUTURE P/S GAYAZA	0779314280
18	OTUTA ISAAC ELCARIM	EMMANUEL P/S LAROO GULU	0777990378
19	OJOK GODFREY	JOY KIM NURSERY & P/S KUMI	0784838069
20	OMUKE LAWRENCE	KABOWA HIDAYAT ISLAMIC P/S RUBAGA	0774162772
21	OBETE AARON SYLVESTER	RAYS OF GRACE JUNIOR SCHOOL, NJERU	0770398208
22	ADIPET RICHARD	ALL SAINTS PS LWEZA WAKISO	0771386328
23	EMETU JUVENTINE	ENTEBBE JUNIOR SCHOOL	0781254710
24	MITPARWOTH DOUGLAS	PAKWACH MODERN SCH.	0786612205
25	WANZALA JOHN	RAHMA NUR. & P/S WAKISO	0753551224
26	ODONG GODFREY OBINA	KAMGER JR. SCH. KASANJE WAKISO	0744573533
27	OKELLO GEOFFREY	ZUHURA EDUCATION CENTRE	0781113432 / 0741679351
28	SEKBA LAWRENCE	MWESIGWA P/S KASANGULA MITYANA	0705369466
29	OMASET FRANCIS	TRUST PS BUKASA	0775265907
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PLATFORM'S C.E.O: 0752041080



## UGANDA NATIONAL EXAMINATIONS BOARD

### PRIMARY LEAVING EXAMINATION

2023

#### INTEGRATED SCIENCE

***Time Allowed: 2 hours 15 minutes***

Random No.	Personal No.

**Candidate's Name:** .....

**Candidate's Signature:** .....

**District ID No.**

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**Read the following instructions carefully:**

1. Do not write your **school** or **district 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 **15 printed pages** altogether.
3. Answer **all** 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 answer or work written in pencil other than drawings 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		
<b>TOTAL</b>		

## **SECTION A: 40 MARKS**

Questions **1** to **40** carry one mark each.

1. Name the type of teeth which develops last in human beings.

.....

2. Give any **one** way in which timely weeding of crops helps to control crop diseases.

.....

3. Give **one** element of weather which helps plants to make their own food.

.....

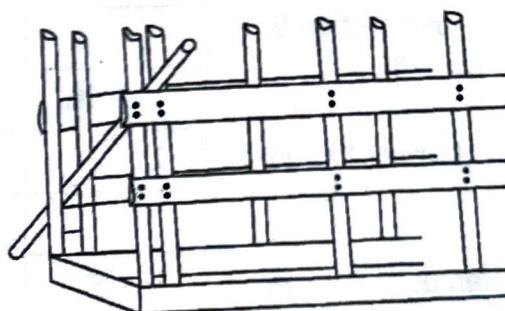
4. State the purpose of pressing the belly of a casualty of near drowning.

.....

5. Give any **one** reason why fish are able to live in water.

.....

The diagram below shows a structure in a cattle farm. Study and use it to answer questions **6** and **7**.



6. Mention any **one** farm activity carried out in the above structure.

.....

7. How is the above structure useful when carrying out the farm activity you have mentioned above?

.....

8. Name the excretory organ that removes water and carbon dioxide from the human body.

.....

9. Mention any **one** similarity between fungi and animals in the way they feed.

.....

10. State **one** way in which the screen on the pipe of a VIP latrine helps to control diarrhoeal diseases.

.....



11. State any **one** piece of advice you can give to children to help them prevent indigestion.

.....

12. State any **one** way in which you can safeguard yourself against smoking.

.....

13. Give the reason why most cooking pans are made of aluminium.

.....

.....

14. State **one** reason why the use of soap makes washing clothes easy.

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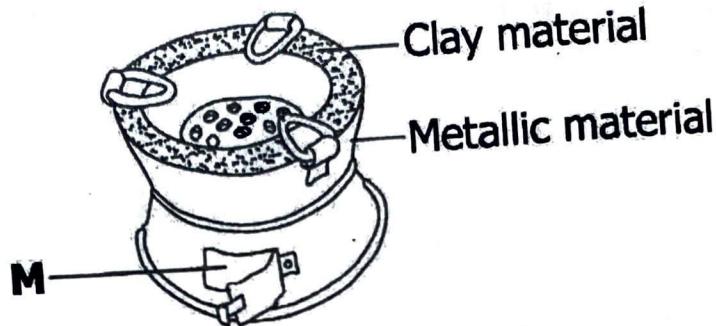
15. Apart from deforestation, mention any **one** other human activity that can result into flooding in our environment.

.....

16. Mention any **one** sign of roundworm infestation in humans.

.....

The diagram below shows a metallic charcoal stove. Study and use it to answer questions **17** and **18**.



17. Give the function of the part labelled **M**.

.....

18. State **one** advantage of building the inner wall of the charcoal stove with clay.

.....

19. State any **one** disadvantage of people living with domestic animals in the same house.

.....

20. Give **one** way in which the use of biogas is helpful in the conservation of environment.

.....

21. State the effect of opaque objects on a beam of light.

.....

22. Apart from making candles, mention any **one** other way in which bees-wax is useful to people.

.....

23. State any **one** reason why farmers are encouraged to preserve food stuffs like sweet potatoes.

.....  
.....

24. Name any **one** force which a pulley overcomes when it is being used.

.....

25. State **one** way in which a mask is important in maintaining the proper functioning of the respiratory system.

.....  
.....

26. Apart from having bright colours, state any **one** other thing that attracts pollinators to flowers.

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27. State any **one** way of caring for simple garden tools.

.....

28. State **one** way in which the Child Health Card is important to a parent.

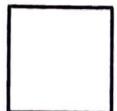
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29. State any **one** factor that affects the pitch of sound produced by an object.

.....

30. Name any **one** body part that may be checked during a school health parade.

.....



31. State any **one** way in which screws can be important in our daily life.

.....  
.....  
.....

32. Apart from being a source of food, give the reason why farmers hang green vegetables in poultry houses.

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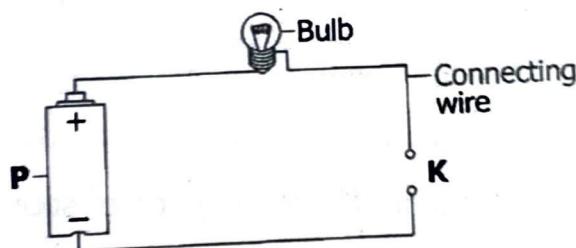
33. State any **one** change in food which shows that food has gone bad.

.....

34. State what would be observed when a plastic pen rubbed in hair is brought close to small pieces of paper.

.....

The diagram below represents a simple electric circuit. Study and use it to answer questions **35** to **36**.



35. Give the function of **P** in the circuit.

.....

36. Why would the bulb **not** light when a piece of glass is used to close

.....

37. Name any **one** part of the human body where a gliding joint is found

.....

38. State any **one** reason why pruning of trees is important in agroforestry.

.....  
.....

39. Write down any **one** activity that a School Environment Club can do to protect a school water source.

.....  
.....

40. State **one** reason why a person suffering from HIV/AIDS is easily attacked by many other diseases.

.....  
.....



## **SECTION B: 60 MARKS**

Questions **41** to **55** carry four marks each.

41. (a) State any **two** effects of rusting on iron sheets.

(i) .....

(ii) .....

- (b) Identify **two** ways in which people protect iron sheets from rusting.

(i) .....

(ii) .....

42. The table below shows an example of a farm record. Study and use it to answer the questions that follow.

Date	Health problem	Animal(s) affected	Treatment/ control method	Cost of treatment
01/8/2023	Mastitis	Goats No. 4 and No. 8	Antibiotics	17,000/=
12/10/2023	Worm infestation	Kids (06)	Dewormers	25,000/=
03/11/2023	Anthrax	All goats	Vaccination	50,000/=

- (a) Name the farm record above.

.....

- (b) Apart from Anthrax, mention any **one** other disease which is controlled by the method used on 03/11/2023.

.....

- (c) Give any **two** reasons why keeping of such a record is important to farmers.

(i) .....

(ii) .....

43. (a) Identify the type of soil erosion common in hilly areas.

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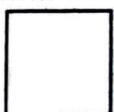
(b) State any **one** danger of soil erosion to the environment.

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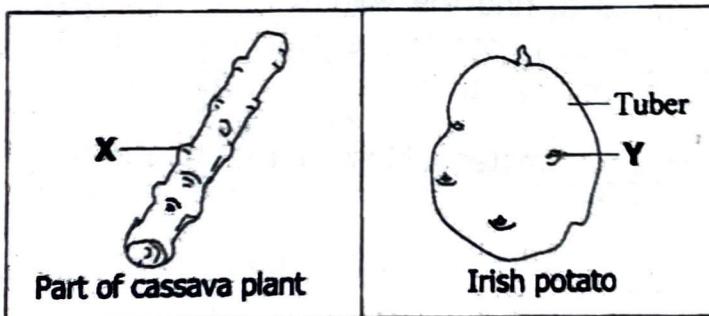
(c) Explain how deforestation causes soil erosion. **(02 marks)**

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.....



44. The diagrams below show part of a cassava plant and an Irish potato that are used in propagation. Study and use them to answer the questions that follow.



(a) Name the part of the cassava plant marked X.

.....

(b) State the method of vegetative propagation where the part of a cassava plant shown above is used.

.....

(c) In which **one** way is the function of part X of the cassava plant similar to that of part Y of the Irish potato?

.....

- (d) Give the importance of the tuber in the propagation of the Irish potato.
- .....

45 (a) What is meant by the term vulnerable group of people?

.....

(b) Apart from the sick, name **one** other group of vulnerable people in a community.

.....

(c) State any **two** ways in which you can care for the sick in your community.

(i) .....

(ii) .....

46. Moses wanted to find the volume of an irregular object. He had the following materials for the experiment; an irregular object, thread, overflow can and water.

(a) Name **one** material Moses forgot to include on the list of his materials.

.....

(b) What is the use of the thread in the experiment?

.....

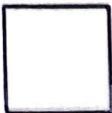
(c) Describe how Moses will get the volume of the irregular object in this experiment. **(02 marks)**

.....

.....

.....

.....



47. (a) Identify any **one** body change in girls during adolescence.

.....

(b) State any **two** ways in which school boys can help to prevent teenage pregnancies.

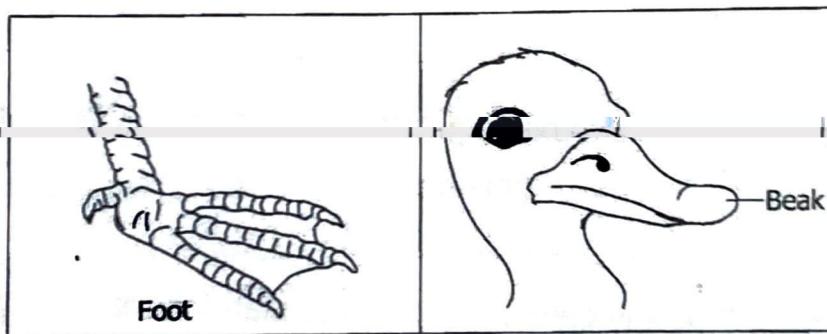
(i) .....

(ii) .....

(c) State any **one** way of caring for the reproductive system in humans.

.....

48. The diagrams below are of a foot and a beak of a bird. Study and use them to answer the questions that follow.



(a) Identify the group of birds with the type of foot and beak shown.

.....

(b) How do the parts of the bird shown above help it live well in its environment?

(i) Foot: .....

.....

(ii) Beak: .....

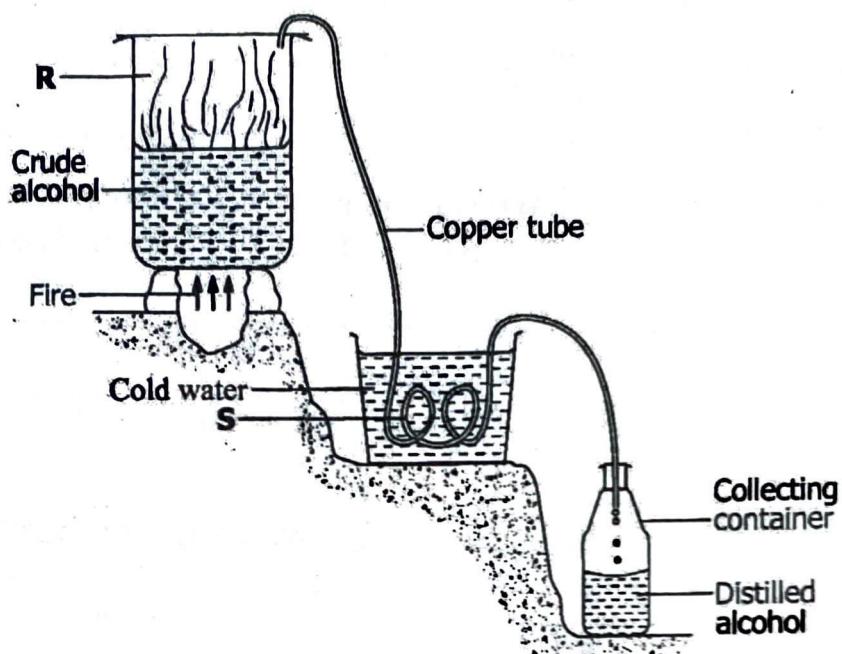
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(c) Give any **one** example of a domestic bird with such type of beak and foot.

.....

49. (a) Give any **one** way in which each of the following elements of Primary Health Care (PHC) is important in a community.
- (i) Food and nutrition: .....
- .....
- (ii) Maternal and child health: .....
- .....
- (b) Identify any **two** ways of giving health education to a community.
- (i) .....
- (ii) .....
- 
50. (a) Apart from planting crops in rows, give another method of planting crops.
- .....
- (b) Give any **two** advantages of planting maize in rows.
- (i) .....
- (ii) .....
- (c) State any **one** way in which the use of chemicals on a farm can be dangerous to a crop farmer.
- .....
- .....

51. The diagram below shows the distillation method of making alcohol. Study and use it to answer the questions that follow.



(a) Identify the physical changes taking place;

(i) at part marked R.....  
.....

(ii) in part S. ....

(b) Give one reason why the container with crude alcohol should be properly sealed.

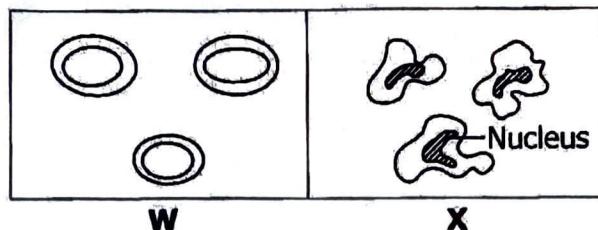
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.....

(c) Give the function of the copper tube in the method shown above.

.....  
.....

52. (a) State any **two** health problems that are common in overpopulated areas.
- (i) .....
- (ii) .....
- (b) Mention any **two** ways in which collecting information on human population helps to address health problems in a community.
- (i) .....
- (ii) .....
53. (a) Give any **two** ways in which plants support human life.
- (i) .....
- (ii) .....
- (b) Mention any **two** ways in which humans can conserve plant life.
- (i) .....
- (ii) .....
54. (a) Identify any **two** characteristics of the female anopheles mosquito that makes it a good vector for malaria.
- (i) .....
- (ii) .....
- (b) How do the following methods help in controlling the spread of malaria?
- (i) Pouring oil on stagnant water.  
.....  
.....
- (ii) Sleeping under a mosquito net.  
.....  
.....

55. The diagrams below show the structure of different blood cells in the human body. Study and use them to answer the questions that follow.



- (a) Name the blood cell marked **X**.

.....

- (b) Give the function of the blood cells marked:

(i) **W** .....

(ii) **X** .....

- (c) Identify any **one** disease which destroys blood cells **W**.

.....

