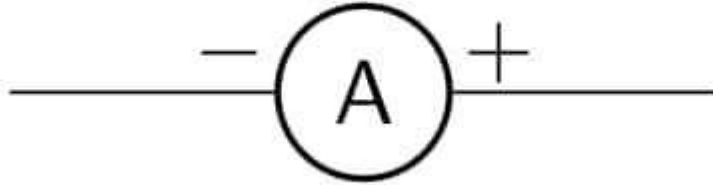


SURE KEY EXAMINATIONS BOARD
SPECIAL PRIMARY LEAVING EXAMINATION
2020
INTEGRATED SCIENCE BLUE PRINT

SECTION A: 40 MARKS

1. **State one cause of weathering of rocks.**
Change in temperature // Action of flowing water // glaciation // Human activities // Action of air // Action of plant roots // Animal movement // Chemicals // Strong wind.
2. **In which part of the body does respiration take place?**
In living body cells / body cells
3. **Give one example of primary cell.**
Dry cell // wet cell
4. **State one use of heat transfer by radiation to a farmer?**
Helps farmers in drying harvested crops
5. **What food value is present in maize?**
Carbohydrates
6. **Why is land regarded as an important factor to living organisms?**
Provides shelter // Provides food
7. **Identify one specific measure that has been put in place to control the spread of corona virus**
Frequent washing of hands // Sanitizing // Social distance // wearing face masks // Quarantining infected people
8. **Why do people smoke?**
To pass time// To feel confident // Peer pressure // To feel warm // To concentrate on their work // Social environment.

9. **Give one exotic breed of goat reared for milk production.**
Toggenburg goats // Saanen goats // Alpine goats
10. Use the diagram below to answer question 10



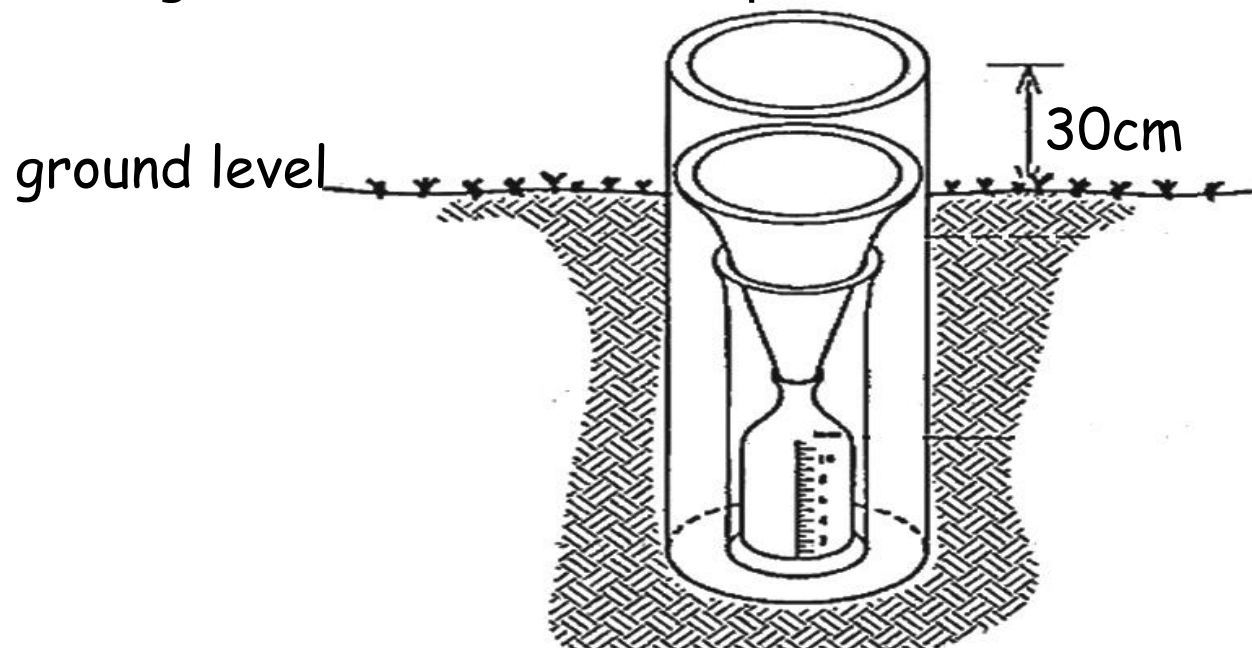
Name the electrical symbol shown above.

Ammeter

11. **State any one physical change which occurs in female adolescents but does not occur in male ones**
Growth of breasts // Enlargement of the hips
12. **Why is it advisable for children at school to drink boiled water?**
To protect them against diarrheal diseases / Boiled water is free from germs
13. **Give any one problem that can result from draining wetlands.**
Floods // drought // Destruction of habitats for aquatic life
14. **Mention one way other crops benefit from the growing of legumes?**
Get nitrates / Legumes help to fix nitrates for them
15. **Give one reason why weaning babies are said to be vulnerable?**
Can easily be harmed due to poor feeding // Need special care and diet.
16. **Identify one good health habit for the teeth**
Regular brushing // Dental flossing // Rinsing the mouth.
17. **Why is it advisable to put the weather instrument above in an open space and not under a tree?**
To get actual measurements / To avoid obstruction of rain drops under a tree.
18. **State one biological method of controlling pests in the garden.**
Keeping silk worms in the garden // Keeping beetles in the garden.

19. **Name the human body organ that uses sound energy.**
The ear / ear

Use the diagram below to answer questions 20 and 21

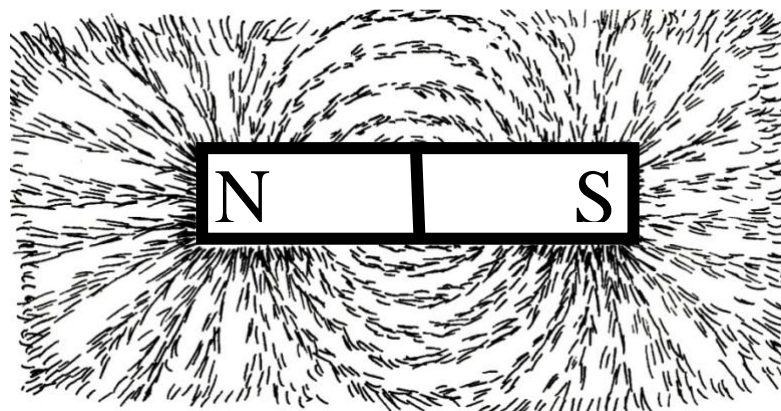


20. **Name the weather instrument drawn above**
Rain gauge (*Mind the spelling of gauge*)
21. **What happens to unlike poles of magnet when brought together?**
They attract each other / Attraction occurs.
22. **Why drugs should be kept out of reach of children.**
To prevent child poisoning // To prevent spoilage of drugs by children
// To prevent drug misuse in children
23. **State the disease that is caused by corona virus in our communities today?**
COVID 19
24. **Give one advantage of early planting.**
Helps to control crop pests and diseases // Promotes food security.
25. **Why is the left ventricle thicker and stronger than the right ventricle?**
Pumps blood to a longer distance than the right ventricle
26. **How are bees dangerous to people?**
Sting people // Can kill people
27. **Why is it important to have a school garden in every school in a country?**
To teach pupils farming skills // For practical studies // Source of income through sales of the produce // Source of food

28. **How does brick making lead to soil erosion?**
 Makes the soil loose making it easy to be carried by flowing water //
 Leaves the soil bare exposing it to flowing water
29. **Give one way birds like ducks are adapted to swimming in water**
 Have webbed feet for padding in water
30. **How does prolonged breast feeding help in child spacing during this period of corona virus outbreak?**
 Delays monthly ovulation
31. **Mention one non-germ disease that affects livings.**
 Lung cancer // emphysema // diabetes // beriberi // scurvy //
 night blindness // asthma // pellagra // goiter // anemia
32. **In which one way can tins containing water be a danger in our environment?**
 Act as breeding places for mosquitoes // Young children can easily drink dirty water in tins.
33. **Mention the best method of controlling vice in poultry.**
 Debeaking *(Reject the rest)*
34. **Write down any one thing you do every day to keep clean?**
 Bathing // Brushing teeth // Washing // Polishing shoes etc
35. **Give one form of weather**
 Windy // Sunny // Raining // Cloudy *(Reject sunshine // rainfall // wind // cloud cover. These are weather elements)*
36. **Outline one characteristic of image formed by a pinhole camera.**
 They are real // inverted // diminished
37. **Give one way plants depend on animals.**
 Get manure from animal droppings // get carbon dioxide from animals.
38. **Mention one example of water contact diseases?**
 Athletes foot // Bilharziasis // Impetigo // swimmer's itch // Dhobi itch
39. **What is demography?**
 The scientific study of population and factors affecting it //
 The study of changing population characteristics in a given area

40. **How does rural electrification preserve the environment?**
Reduces deforestations for wood fuel // Electricity provides alternative source of energy
41. **Mention one way of keeping our bodies clean.**
Regular bathing // Washing clothes // Regular brushing of teeth // Regular washing of the face // Regular wearing of clean clothes.
42. **Give one way of maintaining the proper functioning of the kidney.**
Having regular physical exercises // Feeding on a balanced diet // Drinking plenty of clean boiled water // Avoid eating too salty food
43. **What food value is got from eating honey?**
Carbohydrates
44. **State one cause of soil exhaustion.**
Mono cropping // Soil erosion // leaching // Over grazing // Over use of artificial fertilizers.
45. **State one importance of a good posture.**
Prevents borne deformation // Prevents body aches at older age // Promotes proper blood circulation // Promotes proper digestion of food.
46. **How is a switch useful in a circuit?**
Breaks or completes the circuit at the user's will.
47. **State one control measure the government has put in place/ schools against the spread of corona virus.**
Frequent washing of hands // Sanitizing // Social distance // wearing face masks // Quarantining infected people
48. **Which type of feathers are the chicks hatched with?**
Down feathers
49. **Write one importance of health parades in a school.**
Help to promote personal hygiene among pupils // Help to identify common diseases among pupils.
50. **Give the difference between a fertilized egg and unfertilized egg.**
A fertilized egg can hatch while unfertilized egg cannot hatch

51. **How is a butterfly important to a crop farmer?**
Pollinates farmer's crops.
52. **Give one function of the human ear.**
For hearing // For body balance
53. **How useful is transpiration to the environment?**
Helps in rain formation
54. **State the property of magnets shown below.**



Magnets are strongest at their poles // Magnetism is concentrated at the poles.

55. **Why is air called matter?**
Air has volume / Occupies space // mass / weight // molecules
56. **Where is blood filtered in the body?**
In the kidney
57. **Name the intestinal worm that enters the body through eating half cooked meat.**
Tapeworm
58. **Why is grease applied in the moving parts of the machine?**
To reduce friction. *(Reject To prevent friction)*
59. **Identify one raw material needed by plants to make their own food.**
Presence of water // Presence of carbon dioxide
60. **State one cause of inadequate food in the population.**
Drought // Floods // landslides // Laziness // Poverty // Crop pest // Crop diseases // Poor farming methods // Over population

61. **Mention one living thing that uses water as its habitat.**
A fish // A whale // A dolphin. // A hippopotamus etc
62. **Give one cause of eye defects.**
Elongated eyeball // Thick eye lens // Too short eyeball //
Too thin eye lens // Old age
63. **Why does the science subject encourage children to do a lot of physical exercises daily?**
To strengthen body muscles // To increase body flexibility //
To reduce the level of fats in the body. // To reduce body weight//
To improve blood circulation //To improve digestion in the body //
To improve immunity.
64. **Why is a knife regarded as a simple machine?**
Has few parts and simplifies man's work // Has few parts and easy to operate
65. **Give one reason why a fuse is made of a thin wire.**
For easy melting
66. **How is the retina important during the process of seeing?**
Receives images
67. **How is family planning important to a country like Uganda?**
Helps to control population growth
68. **What is an accident?**
A sudden happening that causes harm to the body or death to a person
69. **What is the use of a sepal in a flower?**
Protects the flower during bud stage // Makes food for the plant
70. **Name the process by which water and mineral salts enter the plant roots.**
Osmosis
71. **State the method of soil formation from rocks.**
Weathering
72. **Why should every home have a plate stand?**
For proper drying of utensils and cutlery

Use the diagram below to answer questions 69 and 70.



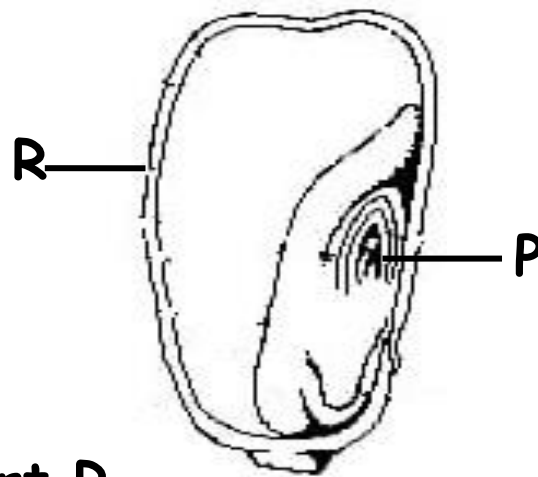
73. **Name the type of leaf venation in the diagram.**

Parallel leaf venation

74. **Mention one crop with the above venation.**

Maize // millet // rice // Sorghum // Wheat // Sugarcane

75. **Study the diagram below and answer questions 35-36.**



76. **Give the name of part R**

Testa / seed coat

77. **What does part P grow into after germination?**

Shoot system

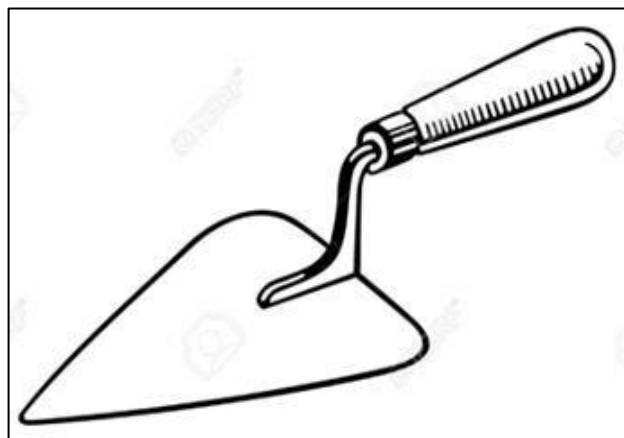
78. **Outline one activity done by a community to control malaria.**

Drain stagnant water // Supplying mosquito nets // Slashing bushes around homes

79. **Why should water be kept in a first aid box?**

For cleaning wounds

80. **Give any one cause of road accidents.**
Bad roads // Failure to follow road signs // Speeding of vehicles and motorcycles // Careless driving // Driving under the influence of alcohol // Driving over loaded vehicles.
81. **Name the body organ where gaseous exchange takes place.**
Lungs
82. **Name one element of PHC which helps in the control of diarrheal diseases.**
Control of Communicable diseases // Control of Diarrheal Diseases // Water and sanitation
83. **Give one reason why people rear goats.**
For meat production // For milk production // For wool etc.
84. **Write down one example of an animal that navigates by the use of echoes apart from bats.**
Whales // Dolphins
85. **What is the role of sterile bees in the hive?**
Repairs the hive // Cleans the hive // Feeds the queen and grubs // Protects the hive
86. **Give the use of the garden tool shown below.**

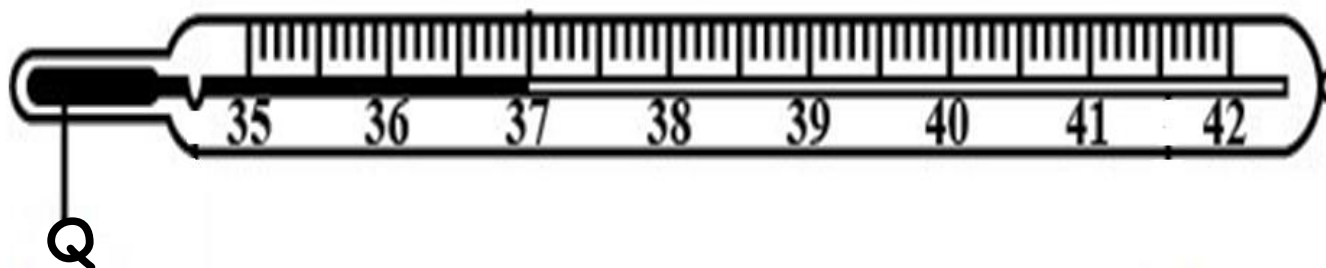


-For transplanting seedlings

87. **What form of energy is turned into hydroelectricity?**
Mechanical energy
88. **Give one advantage of a nuclear family.**
Easy to provide basic needs // Easy to manage / Easy to plans for.
89. **Which component makes up the greatest percentage of soil?**
Rock particles

90. **Give one disadvantage of inbreeding on cattle farm.**
Leads to production of poor quality breeds.
91. **How does draining stagnant water prevent the spread of malaria in a community?**
Destroys breeding places for mosquitoes.
92. **State one reason why a farmer must mulch a tomato garden.**
To conserve moisture in the soil // To control soil erosion.
93. **A child has the following signs and symptoms: skin rash, red eyes, dry cough, high fever and runny nose. What immunisable disease is the child suffering from?**
Measles
94. **Why should a VIP latrine not have a pit cover (lid)?**
To allow free circulation of air / To let fresh air into the pit.
95. **Mention one viral disease that attacks crops.**
Mosaic disease

The diagram below shows a type of thermometer. Use it to answer questions 94 and 95.



96. **Why is part Q made of a metal?**
A metal conducts heat // A metal is durable to protect delicate mercury.
97. **What is the importance of shaking the thermometer after use?**
Resets the thermometer / Brings mercury back to the bulb
98. **Name the part of the eye which receives images.**
Retina
99. **Name the antisocial behaviour which occurs when a man marries his sister.**
Incest

100. **Why do some flowers have brightly coloured petals?**
To attract pollinators
101. **Which class of food is responsible for repair and replacement of worn out body parts?**
Proteins (Reject grow food // Body building foods)
102. **Why is thunder heard after lightning is seen?**
Light travels faster than sound in air.
103. **Give the importance of rearing dual purpose cattle.**
Provide double products
104. **How is a burn similar to a scald?**
Both are skin injuries // Both are caused by heat
105. **Write down one importance of zoos in our environment.**
For practical studies' // Conserve wildlife
106. **Write down one activity carried out during a school health parade.**
Checking children's teeth // hair // finger and toe nails // body // cleanliness of school uniform // Identifying children with ill health.
107. **In what state of matter does heat travel fastest?**
Gaseous state / gas / gases / gas state
108. **Mention one disease that can destroy the blood cell shown below.**



AIDS // Leukemia (blood cancer)

109. **How can soil erosion be controlled in a hilly area?**
By terracing // contour ploughing // Strip cropping
110. **Give one natural cause of environmental degradation.**
Drought // floods // Provides labour // Source of fuel
111. **How are living things useful as a source of energy?**
Source of food // Provide labour // Source of fuel

112. **State the importance of ligaments in a human body.**
Attaches bones together at a joint.
113. **What name is given to the male gametes in a flower?**
Pollen grains
114. **Give one example of a piece of information collected during a health Survey.**
Common diseases that affect people // Latrine coverage // Information on food security // Immunization coverage // housing status // birth and death rates //source of water.
115. **Apart from the kidney, name one other organ of excretion.**
Skin // liver // lungs

The diagram below shows a boy inflating a ball. Study it and use it to answer questions that follow.



116. **State the property of air shown by the above activity.**
Air occupies space // Air exerts pressure
117. **In which way is the above property of air applied in our daily lives besides the above?**
Filling balloons // Inflating car and bicycle tubes
118. **Give one danger of buying drugs from a local shop.**
Might be fake // expired // poorly stored // Not prescribed
119. **What name is given to the method of harvesting sugarcane where the mature stalks are cut to have room for new ones to grow?**
Selective felling
120. **Name the vector responsible for the spread of rabies.**
Mad dog // fox / cat / rabid dog

121. **Give one way of cleaning water for use at home.**
By filtering // decanting

SECTION B: 60 MARKS

122. (a) **What is seed dispersal?**
Scattering of seeds and fruits from the parent plant to other areas
- (b) **Give two methods of seed dispersal.**
Water // animal // wind // self-dispersal
- (c) **State one way seed dispersal is important in the environment.**
- Prevents plant extinction
 - Prevents overcrowding of plants
 - Enables plants to colonise new areas.
123. (a) **What is a fuse?**
A thin solder wire that easily melts to break the circuit to protect it from electrical damage.
- (b) **State one advantage of fuses.**
- Safeguards the electric appliances
 - Reduces the risk of electric fire in a circuit
- (c) **Mention any two reasons why a fuse may break /blow.**
- Due to high voltage in the circuit
 - Due to a short circuit.
 - Due to overloading of the electrical socket
124. (a) **What are anti-social behavior?**
Habits that are not acceptable in the community.
- (b) **Give two causes of anti-social behavior**
- Joining bad peer groups
 - Living in a society with poor morals
 - Pampering children

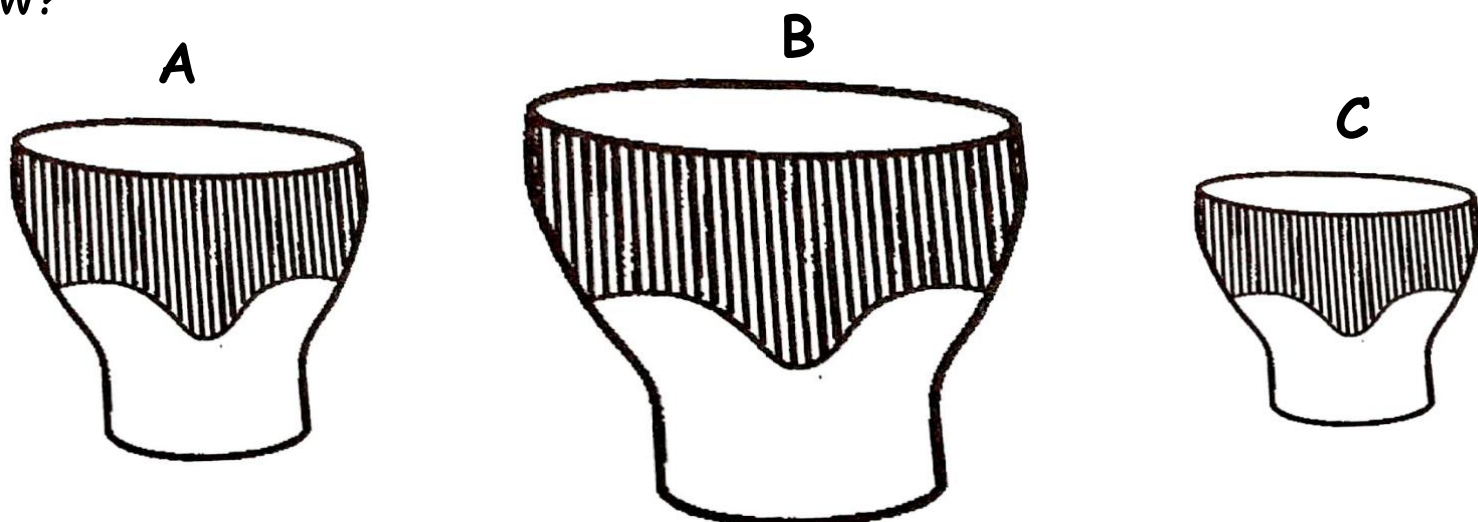
- (c) **Write one effect of anti-social behavior in the society.**
 -May lead to imprisonment // death // loss of some body parts // School dropouts

125. (a) Complete the table below correctly.

Stimulus	Tropism
(i) Light / sunlight	Photosynthesis
Water	(ii) Hydrotropism
Gravity	(iii) Geotropism

- (b) **State one way plants control water loss during long dry season**
 -Shedding their leaves
 -Reducing the size of leaves to thrones.

126. Study the diagrams below and answer the questions that follow?



- (a) Which drum will produce sound with the;
 (i) Highest pitch **Drum C**
 (ii) lowest pitch **Drum B**
- (b) **To which group of musical instruments do the above drums belong?**
 Percussion musical instruments
- (c) **Mention one device used to produce sound.**
 -radio cassettes // gramophones // DvD players // Video disc players // Computer monitors // telephones

127. (a) **Why is COVID 19 taken as a dangerous disease in Uganda today?**
Has killed many people in Uganda
- (b) **State any two community related activities that have caused COVID 19 in our homes today.**
-Failure to wear face masks
-Failure to go for medical check ups
-Poor Social distancing / Over crowding of people.
-Failure to sanitize regularly
-Failure to wash hands frequently
- (c) **How are children able to control the high rate spread of COVID 19 in schools?**
-Regular washing of hands -Keeping a social distance.
-Regular wearing of face masks
128. (a) **What is food path?**
Different stages of food production
- (b) **State two types of food path**
Village food path // town food path // earning food path
- (c) **How are floods dangerous in food path?**
Destroy crops // Causes famine// Lead to low food production
129. (a) **What is a fracture?**
A broken or cracked bone in the body
- (b) **State one sign of a fracture.**
Swelling of injured part // Pain at the injured part // Bleeding at the injured part // Exposure of broken bone from the flesh
- (c) **State the first aid given to a person who has got fracture**
Tie splints around the injured part // Give the casualty crutches // Use a stretcher to carry the casualty to a health centre.

(d) What type of fracture is the diagram below?



-Compound fracture

130. Match the following animals to their ways of adaptation to the environment

Animal	Adaptation
Chameleon	Good eye-sight
Hawk	Speed and shape
Cheetah	Camouflage
Polar bear	Thick fur

- (a) Chameleon **Camouflage**
 (b) Hawk **Good eye sight**
 (c) Cheetah **Speed and shape**
 (d) Polar bear **Thick fur**

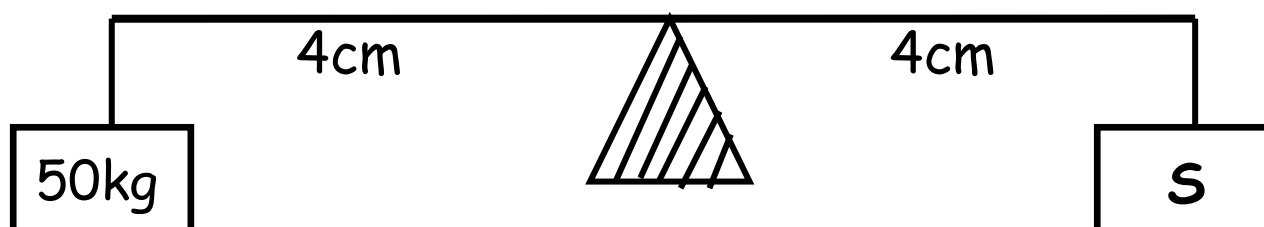
131. (a) What is a machine?

A device or tool with few parts and simplifies man's work

(b) Give one advantage of a machine

- Reduce the effort needed to overcome the load
- change direction in which force is applied
- Increase the speed of doing work

(c) Find the weight at S .



$$\begin{aligned}
 L \times LA &= E \times EA \\
 50 \times 4 &= S \times 4\text{cm} \\
 200/4 &= 4s/4 \\
 50 &= S
 \end{aligned}$$

The weight S is 50Kg

132. (a) **Define the following terms.**
- (i) **Staking** -Provision of support to plants with weak stems
 - (ii) **Propping** -Provision of support to plants with heavy bunches of fruits.
- (b) **Give two advantages of plant training**
- Eases weeding, manuring and harvesting
 - Enables plants to get enough sunlight
 - Prevents ground pests from damaging fruits
133. (a) **What is soil erosion?**
Removal of top soil by its agents.
- (b) **Give two causes of soil erosion.**
Overgrazing // Overstocking // Over cultivation // bush burning // deforestation
- (c) **State one way farmers control soil erosion in their gardens.**
Terracing // mulching // contour ploughing // planting trees // bunding // strip cropping // crop rotation
134. (a) **What is a resource?**
Anything that man uses to satisfy his needs
- (b) **What type of energy is produced by the following**
- (i) **Uranium** -Atomic energy / nuclear energy
 - (ii) **Water waves** -Tidal energy
(Reject hydroelectricity, geothermal)
 - (iii) **Sun** -Solar energy
135. Rearing livestock is one way of fighting poverty
- (a) **Give one example of livestock**
Goats // Cattle // Sheep // Pigs // Rabbits
- (b) **How can rearing livestock help to fight poverty?**
- Farm animals are source of income when sold
 - Animal products can be sold for money

- (c) **Mention any two problems faced by livestock farmers?**
 Animal diseases // Animal parasites // poverty // Shortage of land // Shortage of feeds // Shortage of capital // Limited market
136. (a) **How can blindness be caused among people?**
 Injury on the eyes // Contact of eyes with chemicals // snake venom // Some infections like gonorrhoea
- (b) **How important are the following parts of the eye in the process of seeing?**
- (i) **optic nerves** -Sends impulses to the brain for interpretation
- (ii) **retina.** -It is where images are formed
- (c) **Give one eye disease.**
 Night blindness // River Blindness // Trachoma // Conjunctivitis //iritic
137. (a) **Give two examples of common stem tubers.**
 Irish potatoes // White yams
- (b) **Besides stem tubers, give any two other plants with swollen storage organs.**
 Cassava // Carrot // turn ships // sweet potatoes // beetroots
138. Match the items in list A with those in list B correctly.
- | List A | List B |
|---------------|-------------------------------------|
| Skull | -displacement of a bone at a joint. |
| Ribcage | -has immovable joint in the body. |
| Dislocation | -protects the heart and the lungs. |
| Femur | -longest bone in the body. |
- (a) **Skull** Has immovable joints in the body
- (b) **Ribcage** Protects the heart and lungs
- (d) **Dislocation** Displacement of bones at a joint
- (c) **Femur** Longest bone in the body.

139. (a) **What is pollination?**

The transfer of pollen grains from the anther to the stigma of a flower on the plant.

(b) **State two agents of pollination.**

Some insects // Some birds // Water // Wind

(c) **Give one type of pollination.**

Cross // Self pollination

140. (a) **What is interdependence?**

The way things in the environment benefits from each other

(b) **In which two ways do plants depend on animals?**

-Get carbon dioxide for making food.

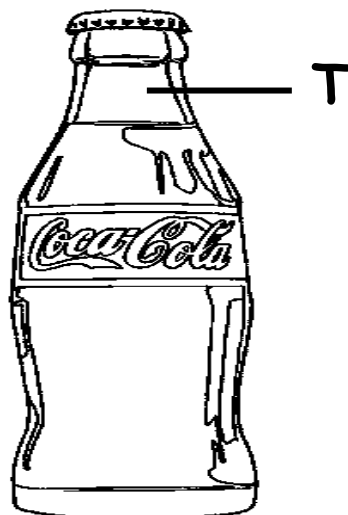
-Animal droppings provide manure to plants

-Some animals carry out seed dispersal

(c) **What would happen to animals if plants failed to make food for themselves?**

Animals would die // Starve to death.

141. Study the diagram below which of a Coca Cola bottle of soda and answer the questions that follow.



(a) **Which gas is put in space marked T ?**

Carbon dioxide

(b) **Give the importance of the gas named above in that space T.**

Preserves the beverage

(c) **Which gas in the atmosphere supports burning?**

Oxygen

(d) **How is wind useful to farmers?**

Helps in drying harvested crops // Helps in pollination of farmer's crops // Helps in winnowing

142. (a) **Outline two types of bee hives.**

Traditional // Modern beehives

(b) **Give one advantage of growing flowering plants near a bee hive.**

Helps to prevent swarming // Bees easily get nectar

(c) **Identify one material bees collect from trees to repair hives.**

Propolis

143. (a) **What is lightning?**

The electric spark formed in the sky when clouds with opposite charges rub against each other.

(b) **How is lightning caused?**

Rubbing of clouds with opposite charges against each other

(c) **How is the occurrence of lightning important to farmers?**

Helps to fix nitrates into the soil.

(d) **State one negative effect of lightning.**

-Strikes plants and animals -May burn buildings

-Leads to damage of electric devices.

144. (a) **What is a mixture of two or more metals?**

Alloy

(b) **Give one example of a common mixture of metals.**

Solder // bronze // brass // steel

(c) **How does heat move from one point of a metal to another?**

By conduction

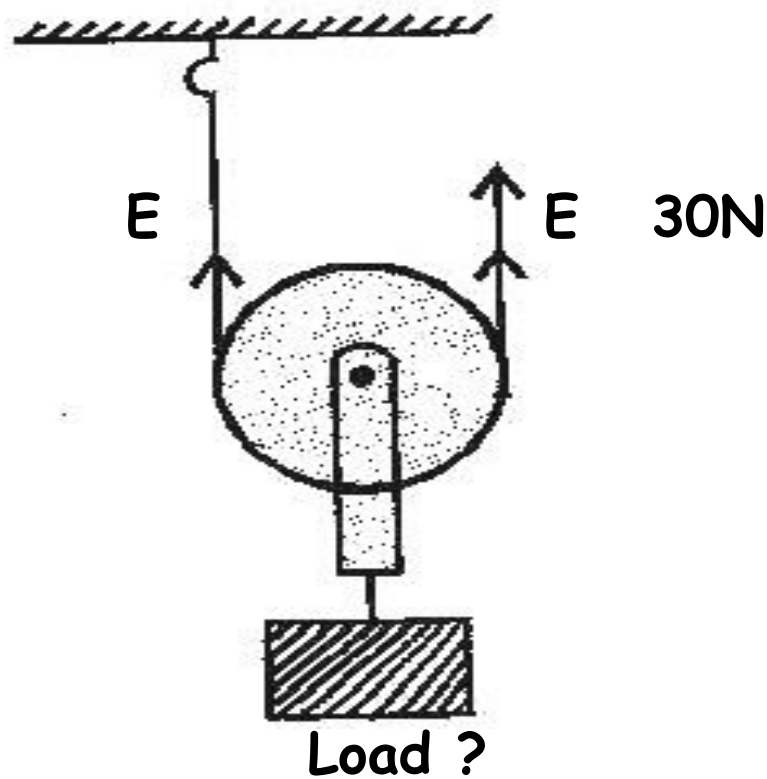
- (d) Apart from painting, give any other method of preventing metallic objects from reusting.

Oiling // greasing // Keeping them in cool dry places

145. (a) What are pulleys?

A wheel with a groove rim that rotates freely about an axle through a center.

- (b) Find the load needed on the pulley given bellow.



$$\begin{aligned} E &= 2L \\ 30\text{N} &= \frac{30\text{N}}{2} \\ \underline{\underline{\text{Load} &= 15\text{N}}} \end{aligned}$$

- (c) State two uses of pulleys.

- For hoisting flags onto flag poles.
- For lifting building materials during construction
- For moving curtains on curtain lines
- Used in scaffold for painting high buildings

146. Study the list of common crops below and use it to answer questions about it.

Millet, Tea, Beans, Cotton.

(a) Which of the above crops is grown and harvested more than once?

Tea

(b) Which of the crops above is a raw-material to textile industry?

Cotton

(c) Mention two ways we can care for our crops.

Weeding // pruning // Spraying // thinning // watering

147. (a) What is sexual deviation?

Sexual habits that are not allowed in the society.

(b) Identify two sexual deviations practiced by people in the community.

Bestiality // homosexuality // Masturbation // Oral sex //

Incest // Lesbianism // gayness

(c) Why is sexual deviation a bad practice?

-Lead to spread of sexually transmitted diseases

-May lead to injuries or death

-May lead to imprisonment

-May lead to loss of respect and friends.

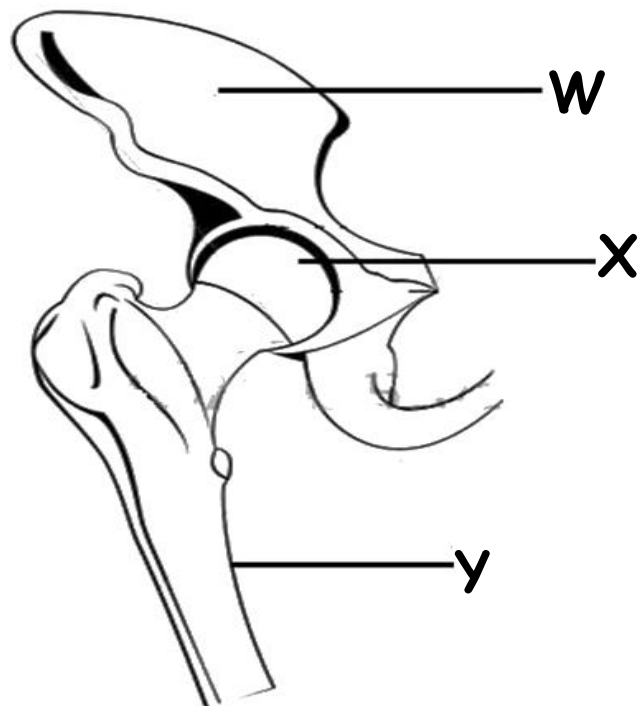
148. Complete the table below by giving the excretory organ and product.

Excretory organ	Product
(i) -Kidney	Urea, Uric acid
(ii) Lungs	-Carbon dioxide // water vapour
(iii) -Skin	Excess salts.
(iv) -Liver	Bile pigments

149. (a) **What is a homestead?**
A home and its surroundings
- (b) **State two components of the environment.**
Rocks // plants // animals // buildings // soil // roads //
Vehicles // industries
- (c) **How are non-living components of the environment important to man?**
Some are; source of income // some are used for transport //
Some provide shelter to man // Some provide building materials
// some are source of minerals
150. (a) **Mention any two health Standard Operating Procedures emphasized in the society to prevent the spread of COVID 19**
Wear face masks // wash hands // Do not touch the mouth,
eyes and nose // sanitize regularly
- (b) **Name any two body organs that are affected by COVID 19.**
Lungs // nose // eyes
151. (a) **What is poultry?**
Domestic birds
- (d) **Give two reasons why a farmer keeps birds.**
For meat // Eggs // Income
- (e) **Mention any one vice common in poultry system**
Egg eating // Cannibalism // toe pecking // Vent pecking
152. (a) **Why can't sound travel through a vacuum?**
There is no medium to transmit sound waves / There is medium
to vibrate.
- (b) **Give one way echoes are useful to pilots of ships.**
Help them to detect obstacles so as to avoid aerial accidents
- (c) **Write down one disadvantage of echoes in our environment.**
Make hearing difficult // Disorganize music

- (d) **How are echoes prevented in theatres and halls?**
 -By covering them with soft porous materials
 -By covering the wall with soft boards // thick curtains
 -By putting ceiling boards // soft wood bamboo reeds

153. The diagram below shows a point of human skeleton. Study and use it to answer questions that follow.



- (a) **What type of movable joint is found at position X?**
 ball and socket joint
- (b) **Name the bone labelled W and Y.**
 (i) W - Scapula
 (ii) Y - humerus
- (c) **How is a hinge joint different from a ball and socket joint?**
 A hinge joint allows movement in one plane while ball and socket joint allows movement in three planes

154. (a) **Where does digestion of proteins begin in man?**
 Mouth

(b) **What digestive juice is produced in the mouth?**
 Saliva

(c) **Which process moves food down the gullet?**
 Peristalsis

(d) **Name one disorder of the digestive system.**
 Diarrhea // Vomiting // Constipation // Indigestion // Heart

155. (a) **How are banana plants propagated?**
By planting the suckers
- (b) **Mention one insect pest that attacks bananas?**
nematodes // banana weevils // banana stalk borers // thrips // scarring beetle
- (c) **Which part of the banana plant does the insect above attack?**
Nematodes - roots / stem
Banana weevils - stem
Scarring beetle - fruit
Thrips - fruits
- (d) **State one common disease of bananas.**
Panama // banana wilt // black leaf streak // sigatoka // moko disease // Black end and cigar tip rot // bunchy top

156. The below plant

A	B
Germination	The way plants make food.
Transpiration	The way a seed develops into a new plant.
Photosynthesis	The way plants release water in form of vapour.
Osmosis	The way plants get water from the soil.

table shows

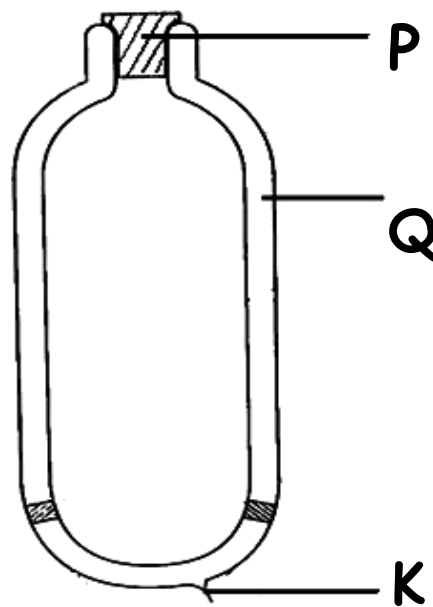
processes. Study it carefully and match items in **A** with those in **B** correctly.

- (a) **Germination:** The way seed develops into a new plant.

- (b) **Transpiration:** The way plants release water in form of vapour
- (c) **Photosynthesis:** The way plants make food.
- (d) **Osmosis:** The way plants get water from the soil.

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157. The diagram below shows a vacuum flask. Use it to answer the questions about it.



- (a) **Name the part labelled K.**
Vacuum seal
 - (b) **How does part P prevent heat loss or gain by conduction?**
It is a heat insulator / bad conduct of heat
 - (c) **In which way is part Q useful to a flask?**
Prevents heat loss or gain by conduction and convection
 - (d) **What is the importance of good ventilation on a house?**
Allows free air circulation in the house.
158. (a) **Give one reason why a frog is able to live comfortably both in water and on land.**
Breathes through its moist skin when in water and through its lungs when on land / Has two breathing mechanisms.
- (b) **To which group of vertebrates does a frog belong?**
Amphibians
 - (c) **How does a frog protect its eggs from predators?**
By using a smelly jelly like substance

- (d) **Give one difference between a frog and a toad.**
-Frog skins are smooth while toad skins are rough
-Adult frogs mainly live in water while toads mainly live on land
-Frogs leap while toads hop.
-Frogs have fully webbed and hinged legs while toads have partially webbed feet.
-Frogs lay eggs in masses while toads lay eggs in ribbons.

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159. (a) **Mention two vaccines given to children at birth.**
BCG vaccine // polio vaccine
- (b) **At what age are children immunized against measles?**
9 months / 36 weeks
- (c) **How can a school health community identify a child who is already immunised against measles?**
-By checking for the scar on the left upper arm
-By referring to the child health card.
160. (a) **Give the most common method of keeping poultry in Uganda.**
Free range system / open range system
- (b) **What is the main purpose of keeping broilers?**
For meat production / For chicken production
- (c) **Name any one cause of egg eating in chicken.**
Delayed feeding // Lack of calcium in bird's diet // Delay to pick eggs // Boredom in the coop // overcrowding of birds
- (d) **Apart from being used as food, give another use of chicken to people.**
Source of income // Chicken droppings are used as farm yard manure // Provide feathers // Used for cultural purposes
161. (a) **Give one way of practicing soil conservation.**
By Mulching // Agroforestry // Crop rotation // Terracing // bunding // Planting trees // Applying fertilizers (manuring the soil)
- (b) **How does mulching control soil erosion?**

Mulches reduces the speed of flowing water.

(c) **Why should farmers practice soil conservation on the farms?**

To maintain soil fertility / To prevent soil exhaustion //
To control soil erosion // To ensure high crop yields during Harvesting

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(d) **Give one common pest of maize crops in Uganda**

Maize stalk borer // American ball worm // termites //
Caterpillars // Monkeys // weaver birds // maize weevils // rats

162. (a) **Mention one water borne disease caused by a virus besides diarrhoea.**

hepatitis // poliomyelitis /polio

(b) **Which germ causes trachoma?**

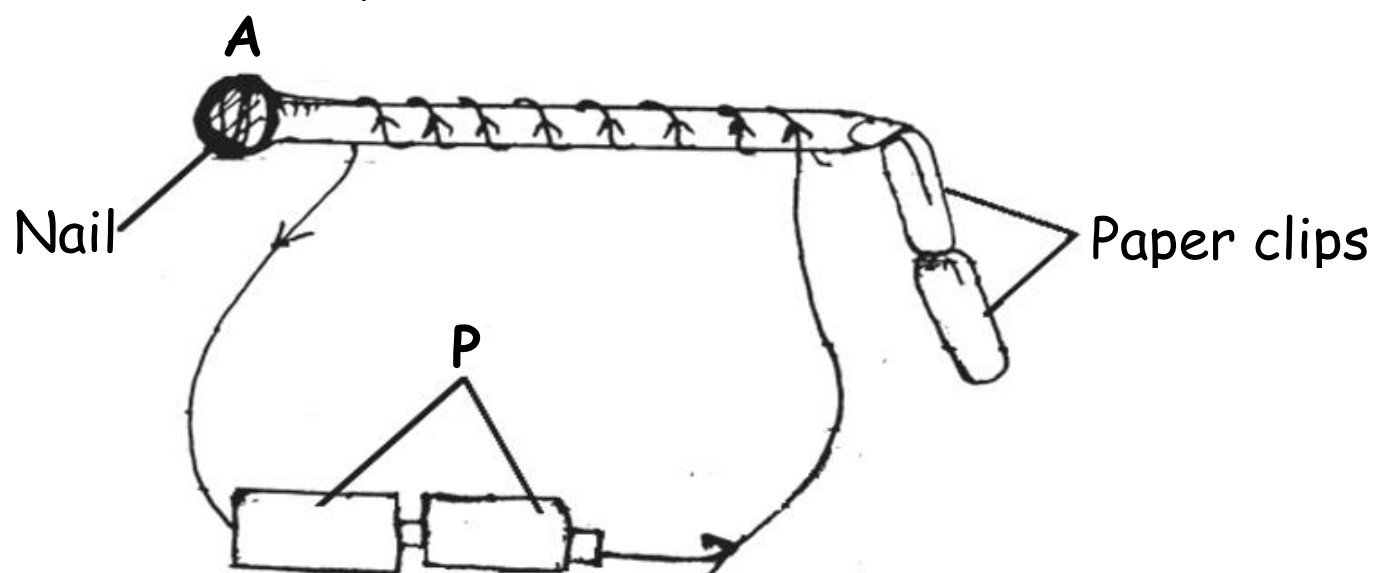
Chlamydia trachomatis

(c) **What kind of blood cells are attacked by:**

(i) **HIV?** -White blood cells // erythrocytes

(ii) **Sickle cell anaemia?** -Red blood cells / erythrocytes

163. The diagram below shows a method of making temporary magnets.
Use it to answer the questions that follow.



(a) **Name the method used to make a magnet above.**

Electrical methods

(b) **What happens to the nail as current passes through it?**

Becomes magnetized / Acquires magnetism

- (c) **Which pole is formed at part A of the temporary magnet?**
North pole
- (d) **What will happen to the magnet made above if the number of cells is increased?**
Will become stronger

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164. (a) **Write down three main stages used to recover salt which has been mixed with sand.**
(i) Put the mixture of salt and sand in a clean container
(ii) Pour water in the mixture and stir to dissolve the salt
(iii) Filter the mixture to separate sand from salt solution and heat salt solution until water evaporates to dryness
- (b) **Why can't we use filtration method to separate the sand and salt?**
Salt dissolves in the mixture leaving sand alone.
165. (a) **What is the use of water during photosynthesis?**
Provides hydrogen needed to make starch
- (b) **What group of organisms carry out photosynthesis?**
Plants / Green plants
- (c) **How does chlorophyll help in photosynthesis?**
Traps / absorbs sunlight energy
- (d) **What class of food is manufactured during the process above?**
Carbohydrates (Also accept starch / glucose)
166. (a) **What is meant by drug misuse?**
The use of drugs against medical instructions // The wrong use of medical drugs.
- (b) **Name any one drug that causes addiction.**
Mira // opium // heroin // Cannabis // Cocaine // alcohol // glue // methadone

(c) State one effect of drug dependency on an individual.

- Leads to brain damage
- Leads to loss of appetite
- May lead to insomnia
- May lead to job neglect
- May lead to self-neglect
- Lowers body immunity

(d) Give one the cause of child poisoning in families.

- Keeping drugs / chemicals in the reach of children
- Careless storage of drugs.

END

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