

# PRE PLE SET ONE

## SCI GUIDE

Prepared by:

**MR. KALULE NOAH**



Scan to Download App



[www.elearnuganda.com](http://www.elearnuganda.com)

**COMING UP**

**PRE PLE SERIES(10) sets**

NAME:.....

SCHOOL:.....



**0780-438054**



**0708-438054**

## SECTION A: 40 MARKS

1. State the main reason why farmers rear light Sussex chicken.  
**For meat production.**
2. Give the reason why the radicle of a seed emerges first during germination.  
**To absorb water and mineral salts for the growing seedling.**
3. State the characteristic of flesh-eating mammals that makes them able to tear flesh of their prey.  
**They have well developed, sharp and pointed canines.**
4. Mention **one** role of sunlight during the process of making glucose in plants.  
**Sunlight provides energy for plants to make starch.**

**Reject: to split water molecules into hydrogen and oxygen**

The diagram below shows a digital clinical thermometer. Study and use it to answer question 6 and 7.

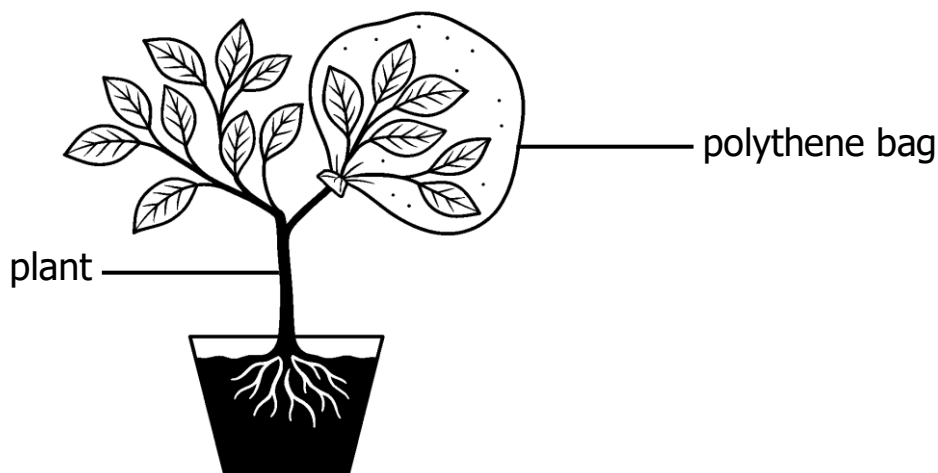


5. State **one** use of a sensor on the thermometer above.  
**It is used to detect body temperature.**
6. State **one** way how cross breeding can improve the quality of birds on a farm.  
**By improving growth rates //By improving disease resistance**  
**By improving meat production //By improving egg production**
7. Name the group of mammals with well-developed incisor teeth for cutting food materials rapidly.  
**Gnawing mammals      Reject: Rodents.**
8. State the reason why water exists in all states of matter.  
**The molecular properties of water change with changes in temperature.**
9. Mention the way in which the speed of wind affects the rate of transpiration.  
**The higher the speed of wind, the higher the rate of transpiration.**
10. Give the reason why a free range system of rearing poultry is commonly used in rural areas.  
**There is enough land in rural areas for birds to move freely.**
11. Mention the reason why burning is regarded as a chemical change.  
**Burning is irreversible and involves chemical reactions.**
12. State the reason why egg laying mammals are called primitive mammals.  
**Egg laying mammals have characteristics of birds, reptiles and mammals**
13. Name the part of a pouched mammal that keeps the joey for further growth.  
**A pouch.**
14. State the importance of a style to a flower besides holding the stigma in position.  
**A style is a passage of pollen tubes as they grow towards the ovary or ovules.**
15. Write down **one** way in which a nictitating membrane is important to birds during flight.

**A nictitating membrane protects the bird's eye from debris/foreign bodies during flight.**

**Protects the bird's eyes from strong wind during flight**

The diagram below shows a setup of an experiment about a certain plant process study and answer question **16**



16. Give the reason why droplets of water appeared in the polythene bag above.

**Due to transpiration.**

17. Mention the way in which oil glands are important to the swimming bird like a duck.

**Oil glands produce oil that waterproofs the skin of duck.**

18. State the importance of adding sand grains in poultry feeds.

**To make grinding of food in the bird's gizzard easier.**

19. Write **one** characteristic that makes a cassava leaf a simple.

**Its leaflets are not completely divided to the leaf stalk**

**Has undivided lamina**

20. Name the group of birds with the food drawn below.



**Climbing bird.**

21. State the major characteristic of a good stem cutting ideal for propagation.

**Should have a node.**

**Reject: Presence of axillary bud.**

22. Write the reason why the lower beak of a bird is left during debeaking.

**To enable the bird to pick feeds easily.**

23. State the general name given to the plumule and radicle of a seed.

**Embryo.**

24. Mention the reason why worker bees are regarded as sterile in the beehive.

**Worker bees do not lay eggs / they are dependent.**

25. Write any **one** example of garden equipment.

**Basket sprayer / Knapsack sprayer / Gum boots/garden fork/hoe/tape measure/trowel/wheelbarrow/**

**Note:** At primary level garden tools, equipment and materials are of the same concept as indicated in the curriculum.

*No need to differentiate them as some authors do.*

26. Give a reason why fangs of a cobra snake are pointed backward.

**To prevent the prey from escaping from its mouth.**

27. State **one** importance of preparing land during dry season.

**To ease the opening of planting holes.**

**To enable a farmer to plant immediately when rain season starts.**

**To enable weeds dry easily. Makes tilling easy**

**Allows timely planting**

**Makes weeding easy and weeds to dry easily**

**Makes ploughing and harrowing easy**

**Improves soil aeration through ploughing and harrowing**

28. Write any **one** importance of studying animal classification to a P.7 candidate besides passing exams.

**To enable learners to know the different criteria used to group animals.**

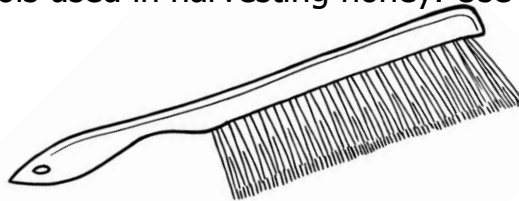
29. Name the part of a fish that works like the steering wheel of a car.

**Caudal fin / Tail fin.**

30. Identify the way in which the skin of a frog is able to allow diffusion of dissolved oxygen.

**The skin of a frog is thin-walled to allow easy diffusion.**

Below is **one** of the tools used in harvesting honey. Use it to answer question **31**



31. State the importance of the above tool during honey harvesting.

**To remove bees from honey combs.**

32. Write the reason why gap filling should be done as soon as the seeds germinate.

**To maintain uniform plant population.**

**Reject: to prevent wastage of space.**

33. Give a reason why it is more difficult to push a wheelbarrow uphill than downhill.

**There is less gravitational force to support the wheelbarrow uphill than downhill.**

34. Mention the way in which tapeworm feeds.

**By absorbing digested food through its porous segments.**

35. State how tree fencing is important in agro forestry.

**Tree fencing protects trees from being destroyed by animals.**

36. Name the vaccine that is given in four doses.

**Polio vaccine.**

37. Mention the way in which timely weeding is important in crop growing.

**Timely weeding reduces the hiding places for crop pests**

**Controls crop pests**

38. Give the way in which high frequency affects the highness or lowness of sounds.  
**Higher frequency increases the pitch of sound while lower frequency reduces the pitch of sound**

**The higher the frequency, the higher the pitch of sound and vice versa**

39. Write any **one** way in which school children can pass on the information about immunization to other people in the community.

**Through songs //Through drama/plays //Through talk shows  
Through poems**

40. Apart from producing urine, give any other use of the Kidney in the body.

**Kidneys regulate the amount of water and salts in the body  
Kidneys helps in the production of red blood cells.**

**Reject the following**

*To filter blood //To reabsorb useful substances for tubular secretion*

## **SECTION B**

41. (a) Name **one** component of the environment that helps in evapotranspiration.

**The Sun.**

- (c) Give any **one** negative effect of rain in the environment.

**Rain causes floods in the environment.**

**Rain destroys farmer's crops //Rain causes landslides**

**Rain supports siltation by encouraging soil erosion**

- (c) Briefly explain how water bodies lead to the formation of nimbus clouds.

**Water bodies are heated by the heat from the sun to form steam that condenses in the atmosphere to form nimbus clouds.**

**OR**

**Water bodies add water vapour to the atmosphere which condenses to form nimbus clouds.**

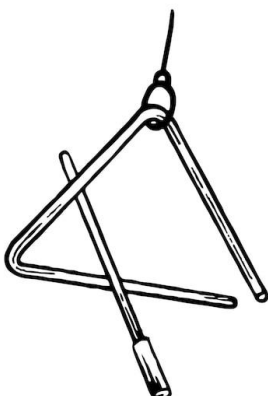
42. (a) Write **two** methods of writing music.

**Staff notation // Solfa notation**

- (b) Mention any **one** method of producing sound in percussion musical instrument.

**By hitting / by shaking / by striking.**

- (c) Why is a triangle left with the space at its base as shown below?



**For easy vibration when hit.**

43. (a) How is the upward and downward stroke important when brushing teeth?

**It helps to remove food particles between teeth.**

- (b) How is the ear cotton swab important in promoting personal hygiene?

**It cleans the ears by removing excess earwax.**

- (c) State **one** way long hair can encourage lice to infest the body.

**Long hair provides hiding place for lice.**

- (d) Why should sticks be chewed at **one** end before using it to clean the teeth?

**To increase its surface area for cleaning teeth.**

44. You are provided with: **salt crystals, water, container, and source of heat.**

If Emmanuella accidentally poured salt in water,

Write four procedures you would take to obtain local salt crystals.

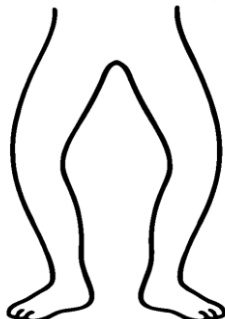
**Place the container in place**

**Pour the mixture of water and salt into a container**

**Stir to form a salt solution.**

**Heat the salt solution to dryness to obtain salt crystals.**

45. Below is a diagram showing the lower part of a child suffering from a certain disease.



(a) Name the disease the above child is suffering from.

**Rickets.**

(b) Mention the best way in which a mother for the above child can prevent such a disease.

**Feeding the child on food rich in vitamin D.**

(c) State the cause of pellagra in children.

**Lack of vitamin B<sub>3</sub> in the diet.**

(d) Write **one** mineral that increases blood volume in the body.

**Iron.**

46. (a) State the reason why sand soil is used to make glasses.

**Sand soil contains silicate.**

(b) State **two** features used to classify soil:

**Soil texture // Soil structure // Soil colour // Amount of humus.  
Stickiness when wet**

(c) Give the way in which high temperature causes weathering of rocks.

**By causing expansion of rocks leading to breakage.**

47. (a) Write down a reason why it is important to know someone's pulse rate before giving first aid.

**To know whether the person is dead or alive.**

**To check if the person is alive and their heart is functioning**

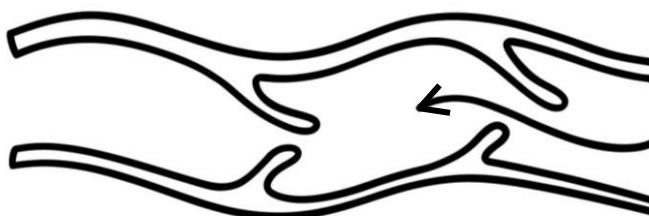
(b) Write any **one** similarity between veins and arteries besides providing a medium of blood flow.

**Both have walls / both have lumen.**

(c) State **one** importance of blood capillaries in the body.

**They allow exchange of body materials.**

(d) Draw an arrow in the blood vessel below to show the blood flow that would make the valves to close.

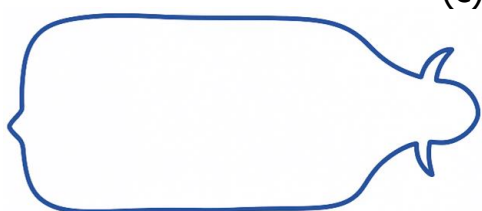


48. (a) Give the way in which the following activities leads to soil erosion.
- Mono-cropping:**  
**Mono-cropping makes soil particles loose hence making it easy to be taken away by environmental agents.**
  - Bush burning:**  
**Bush burning leaves the land bare exposing it to the agents of Soil erosion.**
- (b) State the way in which contour ploughing controls soil erosion in hilly areas.  
**Contours reduce the speed of flowing water.**
- (c) Write any **one** cause of leaching.  
**Excessive rainfall // Over irrigation // Poor soil structure**

49. (a) Name the gas used in the preservation of semen used for artificial insemination.

**Nitrogen.**

- (b) Draw the shape of a beef cattle in the space provided.



- (c) State the difference between steaming up and flushing as used in cattle keeping.

**Steaming up is the feeding of a pregnant cow on feeds rich in protein while flushing is feeding of a cow on nutrient feeds before mating.**

- (d) Name the viral disease that attacks the feet of cattle  
**Foot and mouth disease.**

50. (a) Name the germ that causes AIDS.

**HIV//Human Immune deficiency Virus//Virus.**

- (b) State the reason why a person suffering from AIDS is attacked by many diseases.

**HIV weakens the immune system**

**Due to weakened immune system**

- (c) Mention **one** example of opportunistic diseases.

**Tuberculosis // Diarrhea//candidiasis//**

- (d) Give a reason why it is easy to control AIDS than malaria.

**It is easy to abstain from sex than avoiding mosquito bites.**

51. Complete the table below correctly

| Organ          | Function                     | Disease                    |
|----------------|------------------------------|----------------------------|
| Brain          | for thinking                 | meningitis                 |
| Ear            | hearing                      | <b>Ear cancer //otitis</b> |
| Liver          | <b>to produce bile juice</b> | cirrhosis                  |
| <b>Stomach</b> | churns food into chyme       | peptic ulcers              |

52. (a) Give the meaning of the term matter.

**Matter is anything that has mass and volume.**

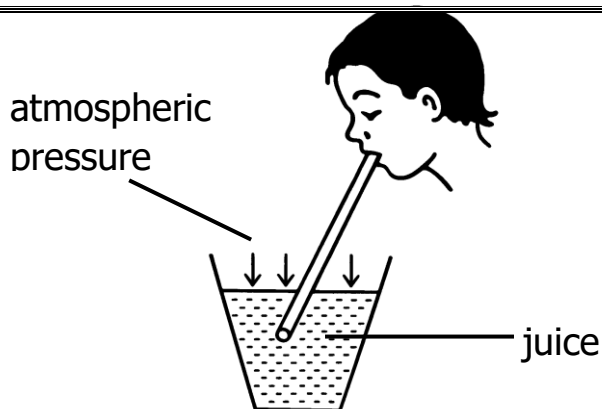
- (b) Name the property of air illustrated the diagram below.

**Air exerts pressure**

- (c) What is the difference between the atmospheric pressure and the pressure in the straw in the diagram below?

**The atmospheric pressure is higher than the pressure in the straw.**





(d) Apart from drinking using a straw, how else is the above property of air applied in our day to day life.

**Helps in inflating balloons // Helps in inflating bicycle tyres**

**Helps in inflating car tyres**

**Helps in flying the kites for children to play**

53. (a) State the role of yeast in the fermentation of sugar to produce alcohol  
**Yeast speeds up the rate of fermentation**
- (b) Name any **one** physical change which leads to distillation process of alcohol production.  
**Condensation // Evaporation**
- (c) State **one** effect of alcoholism to the following groups of people.
- Families: **Leads to family neglect // leads to child abuse//spouse abuse//Family breakdown**
  - Communities: **Leads to road accident//increased crime rates  
Loss of important people due to death**
54. (a) Name the type of teeth missing in the milk set of teeth.  
**Premolars**
- (b) Compare premolars and molars in terms of size.  
**Premolars are smaller than molars**
- (c) State the way in which dental braces are important in the proper alignment of teeth.  
**Dental braces prevent improper growth of teeth**
- (d) Give the way in which dental floss is important in promoting oral hygiene.  
**Dental floss remove food particles between the teeth**
55. (a) Write down **one** way in which a health parade promotes personal hygiene among school children.  
**By creating awareness of proper personal hygiene  
Creates awareness about the importance of proper personal hygiene  
Creates awareness on how to maintain proper hygiene practices  
Helps school children to adopt proper hygiene practices  
Helps school children to involve in regular hand washing campaigns**
- (b) Give any **one** group of people who conduct a health parade.  
**Health prefect //School nurse//Teachers//matrons**
- (c) Write **one** indicator of poor personal hygiene.  
**Long fingernails //Long toenails //Uncombed hair //Dirty clothes  
Dirty teeth //Dirty tongue //Dirty skin//Bad body odour  
Overgrown pubic hair/Overgrown hair under armpits/Feet cracks**
- (d) State the importance of a pumice stone in promoting personal hygiene  
**For scrubbing the feet.**

**END**