

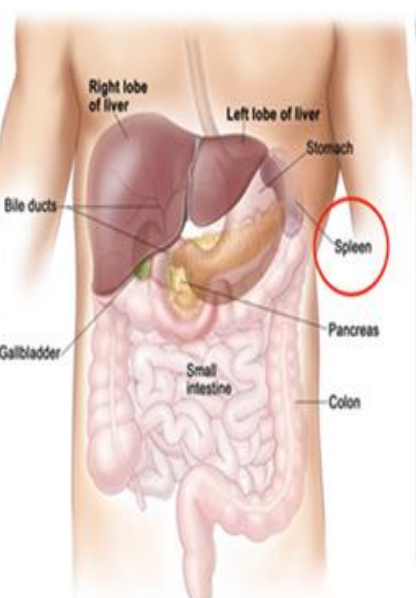
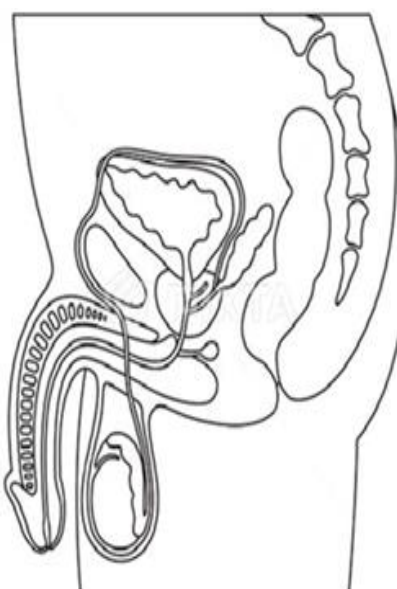
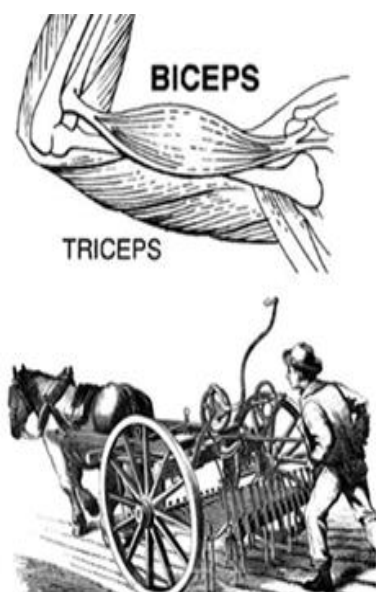


PACE – PREPARE A CHILD EXAMINATIONS BOARD
PACE CONSO PRIMARY LEAVING EXAMINATION SET 7

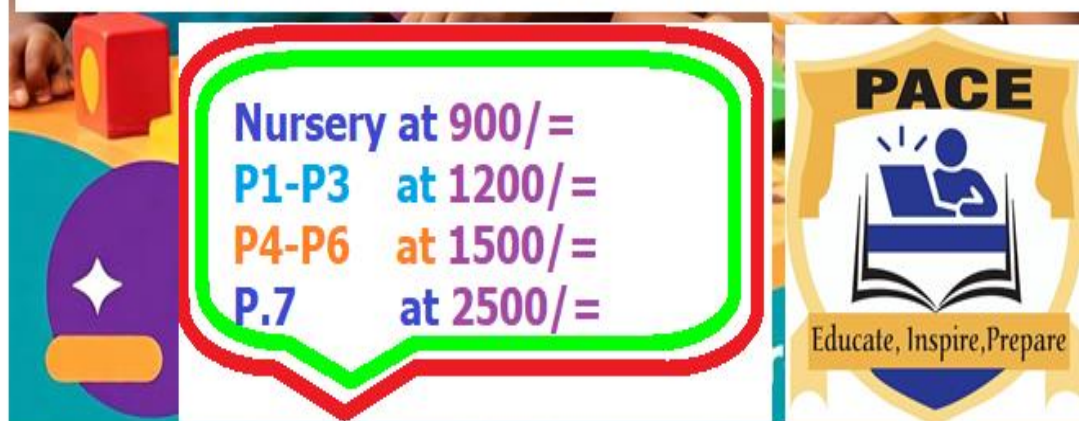
2024

INTEGRATED SCIENCE

Marking guide



2025 PACE Examinations Board 0754742152/0786616884



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Turn Over

Prepare today, succeed tomorrow

Section A (40MARKS)

1.Name the type of teeth that is missing in the milk set.

➤ **Premolars/ / Premolar teeth**

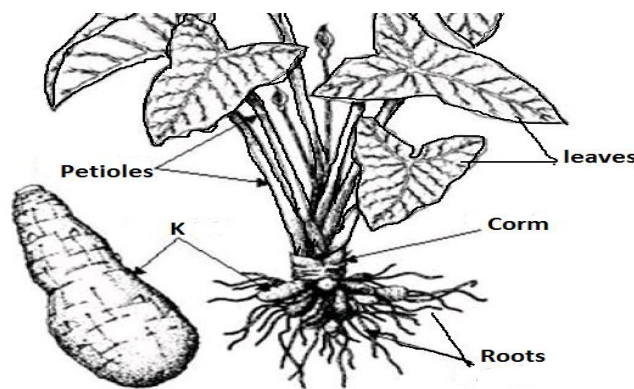
2.How does early weeding of crops control crop pests and diseases in the garden?

- **Early weeding destroys breeding places for crop pests**
- **Early weeding breaks the life cycle of crop pests**
- **Early weeding gives strength to fight against crop diseases**
- **Early weeding eases management of crop diseases by spraying**
- **Early weeding controls crop pests that spread crop diseases eg white flies and aphids**

3.Name the garden tool used in collecting dug weeds in the garden

➤ **Garden rake**

The diagram below shows an example of a common tuber. Study and use it to answer questions that follow.



4.Name the common crop tubers marked with letter **K**.

➤ **Cocoyams/ Cocoyam tubers/Taro yams**

5.Identify the group of common tuber crops marked with letters **K**.

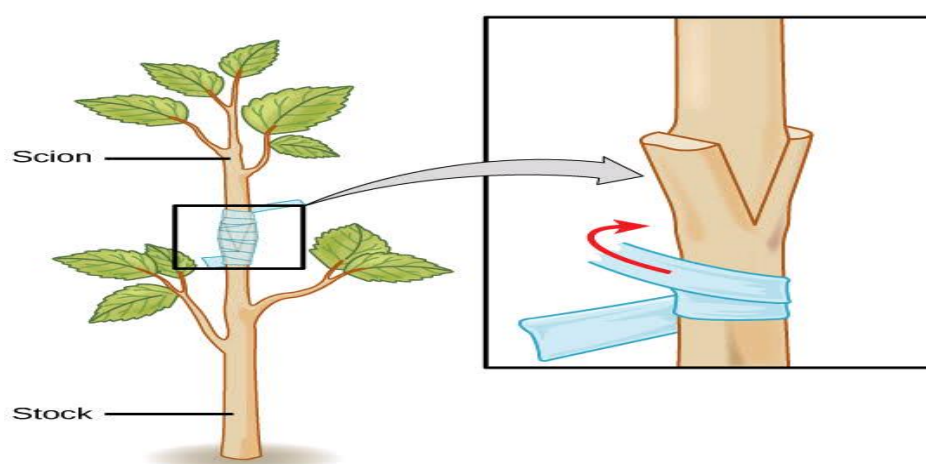
➤ **Stem tubers**

6.Write any **one** of the misconceptions and myths about family planning.

- **Birth control methods are 100% safe**
- **Birth control pills increase the risk of getting cancer**
- **Birth control pills cause infertility**
- **Birth control pills makes women to grow beards**
- **A women cannot get pregnant while breastfeeding**
- **A women cannot get pregnant when she have sex during her periods**
- **Emergency pills are same as abortion pills**
- **Vasectomy makes a person impotent**

- ✓ A misconception is a wrong idea **while** a myth is a commonly held false belief

The diagram below is of a method of plant propagation. Study and use it to answer questions that follow



7. Name the method of plant propagation shown in the diagram above.

➤ **Grafting method**

8. State any **one** importance of the method of plant propagation shown in the diagram above.

- **New plants mature faster**
- **New plants produce high yields**
- **New plants need less attention**
- **It helps plants to escape the risky seedling stages**
- **It controls unnecessary distribution of plants in an area**
- **It helps to maintain good plant characteristics**

9. Identify any **one** method of controlling crop pests and diseases.

- **Spraying with pesticides/ Thinning/ Early harvesting**
- **Practicing crop rotation/ Pruning/ Timely weeding / Putting scare crows in the garden/ Seed dressing/ Fencing the gardens/ Planting pest resistant crops/**

10. State any **one** reason why first class levers enable people to use less effort.

- **They make the effort arm longer/ The load is nearer to the pivot.**

11. By what process is lactic acid removed from human bodies?

- **Sweating**

12. State **one** indicator of starvation among children

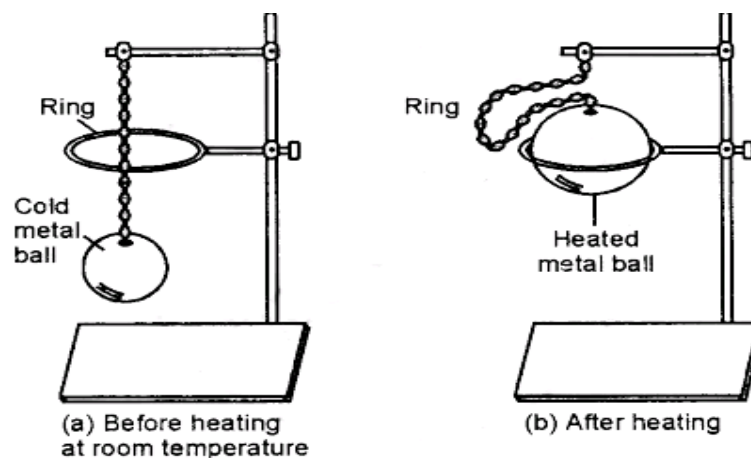
- **Feeling hungry all the time/ Constant body weakness/**
- **Old man's face/ Thin body/ Pot belly/**

13. Write **one** difference between light and sound energy.

- **Light travels through rays while sound travels through waves**

- **Light enables us to see while sound enables us to hear**
 - **Light does not need a medium of transmission while sound does.**
14. How can the principle of moments be applied in our daily life?
- **It is used in measuring weight of sugar using scales**
 - **It is used in measuring weight of meat using beam balance**
 - **It is used in carrying materials using a wheelbarrow**
 - **It is used by children during playing using a sea saw**
15. State any **one** way in which heat transfer by convection is useful in our daily life.
- **Convection currents keep charcoal stoves burning**
 - **Convection currents keep iron box burning**
 - **Convection currents help in air circulation in the living house**
 - **Convection helps to drive smoke away from a lantern lamp**
 - **Convection currents drive bad smell from latrines**
 - **Convection currents take out smoke from the kitchen**
16. Write any **one** way of controlling diseases caused by fungi.
- **Early treatment of fungal diseases**
 - **By maintaining proper personal hygiene**
 - **By avoiding sharing clothes with infected people**
 - **By avoiding to have unprotected sex with infected people**
17. Name the germ that is responsible for causing tetanus among children.
- **Bacteria**
18. State the method used to separate substances with different densities.
- **Using a separating funnel**
 - **Decantation // Floatation method**

The diagram below shows effect of heat on a metallic ball; use it to answer questions 19, 20 and 21



19. State the behaviour of a metallic ball after heat gain.

- **It fails to pass to pass through the ring// it expands//increases in size//**

20. Why did the metallic ball fail to pass through the ring as shown in diagram **b**?

- **The metallic ball expanded due to heating**
- **The metallic increased in size due to heating**

21. State any **one** responsibility of an individual in the promotion of PHC.

- **Participating in general activities**
- **Going for immunization**
- **Drinking boiled water**
- **Washing hands with clean water and soap after visiting latrines**
- **Brushing teeth regularly**

22. Write **one** difference between the invalids and convalescents.

- **Invalids are people who are too sick to care for themselves while convalescents are people recovering from sicknesses through treatment**

23. Write any **one** importance of keeping health records on a farm.

- **It helps farmers to know the expenditure for treating sick animals**
- **It helps farmers to know the common diseases and ways of preventing them**
- **It helps identifying of sick animals easy**
- **It makes planning for the health of animals easy**
- **It makes culling of animals easy**

24. In which **one** way are scales on the legs and toes useful to scratching birds?

- **Scales provide protection during scratching while looking for food**

25. How is melting important in our daily life?

- **Melting turns butter into liquid for food**
- **Helps in making alloys**
- **Helps in welding of metals**
- **Helps in making candles from beeswax**

- **Helps in making drinking water from ice**
- **Helps in making soap by melting ingredients**
- **Helps in recycling plastics**
- **Helps in recycling metals**
- **Helps in water cycle by changing ice into water in order to cause evaporation.**

26. State **one** way in which pricking out seedlings is important.

- **Pricking out reduces competition for nutrients//water//space//carbon dioxide//oxygen//**
- **Helps to prevent easy spread of diseases among seedlings//**

Pricking out is the removing of overcrowded seedlings from a nursery bed to plant them elsewhere.

27. Identify the meaning of mixed cropping//intercropping.

- **Mixed cropping is the growing of more than one crop on the same piece of land at the same time.**

28. Apart from the strings, give any **other** garden tool used for crop spacing.

- **Garden line**
- **Garden tape measure**

29. Mention any **one** factor that leads to alcoholism.

- **Early exposure to alcohol**
- **Stress//Peer pressure//Social acceptance**
- **Family background//Sexual abuse//Cultural norms//Too much sorrows//Loss of beloved relatives**

30. State any **one** way of caring for the human kidneys.

- **Taking enough water regularly**
- **Avoiding holding urine for a long time**
- **Getting enough sleep and rest**
- **Having enough regular physical exercises**
- **Feeding on a balanced diet**

31. In which way is conception different from pregnancy in human beings?

- **Conception is successful fertilization while pregnancy is the period from conception to birth**
- **Conception is the process of zygote formation while pregnancy is the period from conception to birth.**

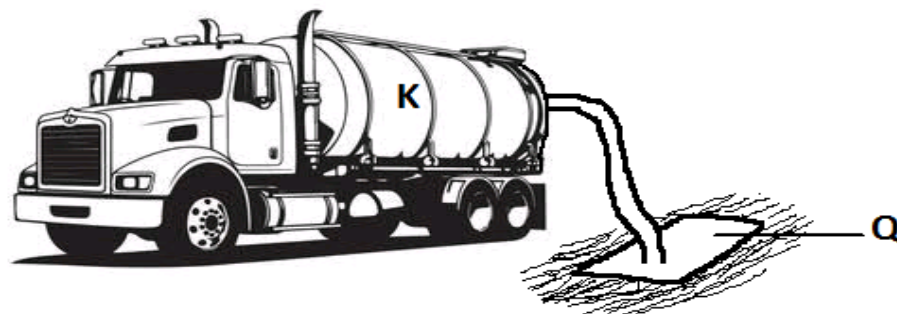
32. How are the right and left ventricles of the heart adapted to their function?

- **Right ventricle has thinner walls to pump blood with low pressure to the lungs to be oxygenated**
- **Left ventricle has thick walls to pump blood to all body parts.**

33. Give any **one** effect of AIDS on the individual.

- **Weakened immunity// loss of weight//**
- **Loss of jobs//death//much worries//**
- **Depression// social isolation//stigma//**
- **Restricted movement to some areas**

Use the diagram showing sanitary vehicle, use it to answer 34, 35 and 36



34. Identify the part marked with letter **K**.

- **Cesspool emptier tank**
- **Sewerage emptier tank**

35. Write **one** importance of part marked **Q** in the community.

- **Keeps wastewater from homes**
- **Stores urine and faeces**
- **Keeps wastewater from industries**
- **Keeps wastewater from showers and bathrooms**
- **Prevents contamination of water in wells**
- **Prevents pollution of water in lakes**

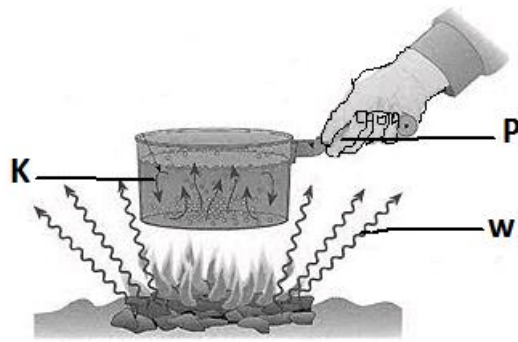
36. How does the cesspool emptier vehicle above help in the control of diarrhoeal diseases?

- **It helps in proper disposal of sewerage that would attract houseflies that spread diarrhoeal diseases**
- **It helps in emptying septic tanks and latrines.**

37. State any **one** natural family planning method that prevents sperms from reaching the ova.

- **Abstinence method//calendar method//**
- **Basal body temperature method//**

The diagram below shows methods of heat transfer; use it to answer questions 39 and 40.



38. Name the heat transfer method marked with letter **P**.

➤ **Conduction method**

39. In which **one** way is heat transfer marked with letter **W** useful in the environment?

- **Helps in drying clothes**
- **Helps in drying harvested crops**
- **Helps in rain formation**
- **Helps people to warm themselves**
- **Helps in preserving some food stuffs.**

40. Mention any **one** effect of teenage pregnancies among people

- **Early marriage**
- **Forced marriage**
- **Difficult delivery**
- **School dropouts//Family neglect//Lack of financial support**
- **Obstructed labour**

Section B (60MARKS)

41. (a) Give the meaning of the following terms;

(i) Convulsions

➤ **Uncontrolled jerky movements of the body**

(ii) Near drowning

➤ **Condition when the lungs are filled up with water but the person is not yet dead.**

(b) Give any**one** cause of convulsions among people.

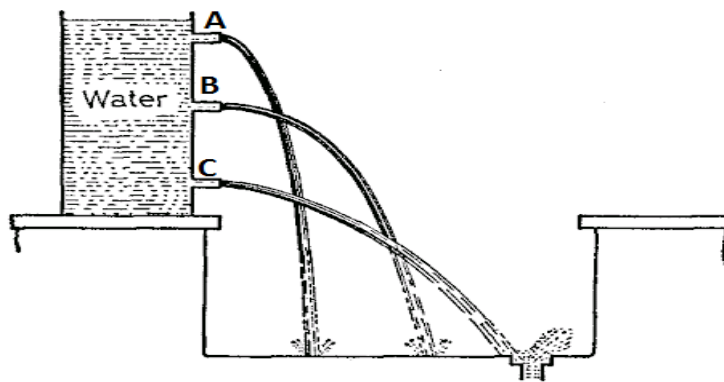
- **High fever//head injuries//Cerebral malaria//**
- **Epilepsy // meningitis//Encephalitis//**

(c) State the first aid for convulsions among people.

➤ **Put the hard object in the victims mouth to prevent biting of the tongue**

➤ **Apply tepid sponging to reduce temperature**

The diagram below shows an experiment for a certain property of liquids; use it to answer question 42.



42. a) What does the experiment above prove about liquids?

➤ **Pressure in liquids increases with increase in depth.**

NB; There is a difference in the distance as water pours out due to some reasons namely;

- ❖ Due to pressure increasing with depth
- ❖ The difference in pressure of the liquid at each tap

(b) Identify the tap that releases water with more strength.

➤ **Tap C**

(c) Provide a reason to support your response in (b) above

➤ **The pressure at C is greater than pressure at A and B**

➤ **Tap C experiences the most pressure compared to A and B.**

(d) How can the property of liquids above be applied in our daily life?

➤ **Used to fetch water from water tanks**

➤ **Used in irrigation of crops**

➤ **Used by firefighters in putting out fire**

Compare the human ear with organs of hearing in other animals shown in the table

| <u>Animal</u> | <u>Organ(s) of hearing</u> |
|---------------|----------------------------|
| Frogs | Lateral line |
| Snakes | Antennae/feelers |
| Fish | Eardrum and inner ear |
| Insects | Jawbone and inner ear |

Frogs

Eardrum and inner ear

Snakes

Jawbone and inner ear

Fish

Lateral line

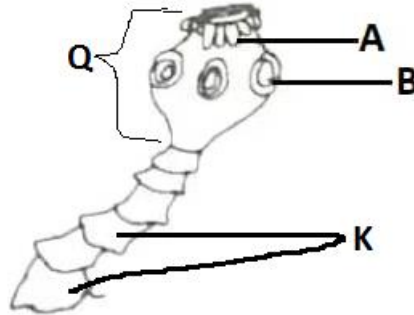
Insects

Antennae/feelers

43. a) Give any **one** example of each of the following worms.

- (i) Segmented worms.
Using **BELS**
 - **Bristle worms // Earthworms // Leaches // Sandworms**
- (ii) Flat worms.
 - **Tapeworms // liver flukes //**

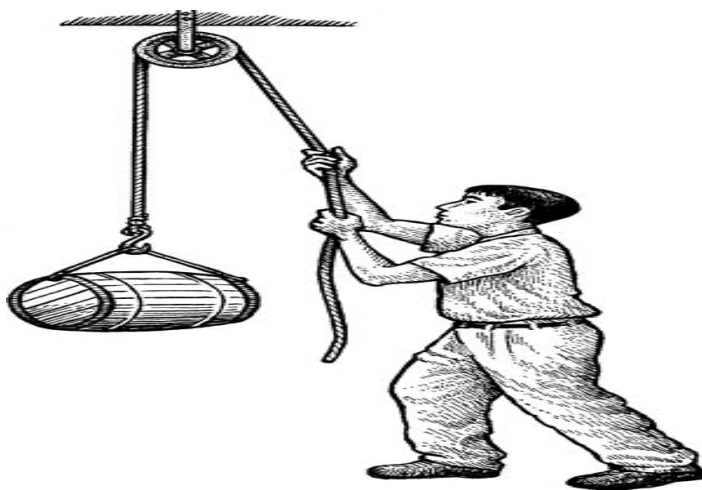
Study the intestinal worm below to answer questions that follow



- b) Name the marked with letter **Q**
 - **Scolex**
- c) How does the above intestinal worm benefit from parts **A** and **B**?
 - **For attachment on to the walls of intestines**
 - **For holding on to the walls of intestines**
- 44. a) Give any **two** examples of objects that form shadows
 - **Walls // plastics // trees // stones**
 - **Wood // human beings // metals**
- (b) State any **two** ways in which transparent objects are useful to people in our daily life.
 - **Used in making lenses**
 - **Used in making window glasses**
 - **Used in making sunglasses // spectacles**
 - **Used in making car windscreens**
 - **Used in making headlamps in vehicles**
- 45. (a) Give the meaning of the drug misuse.
 - **Drug misuse is the use of drugs without the doctor's advice**
 - **This is the use of drugs against the doctor's advice**
 - **This is the wrong use of drugs**
- (b) Write down **one** factor that leads to drug misuse.
 - **Self medication // buying drugs from local shops**
 - **Ignorance // poverty // taste of the drugs //**
 - **Keeping drugs in children's reach // too much pain**
- (c) How is drug misuse different from drug abuse?
 - **Drug misuse is the use of drugs without the doctor's advice while drug abuse is the use of drugs in the way that is harmful to the body.**
- (d) Mention any **one** way of storing drugs safely.

- **Locking drugs in cabinets**
- **Keeping drugs free from children's reach**
- **Keeping drugs in cool places**
- **Keeping drugs in dry places**
- **Keeping drugs away from direct sunlight**
- **Keeping drugs away from dust**

Below is a method showing a simple machine, use it to answer questions that follow.



46. a) Name the type of pulley shown in the above diagram

- **Single fixed pulley**

c) Write **one** use of type of pulley shown above at schools.

- **For raising or lowering flags on flagpoles**
- **They are used to lift building materials.**

(c) State any **two** ways in which the above type of pulley simplifies man's works?

- **Changes the direction of forces**
- **Increases the speed of doing work**
- **Effort and load move in different directions**

47. a) State any **one** factor considered when grouping birds.

- **Mode of feeding**
- **Nature of the beak**
- **Nature of the talons/ /feet**

b) Write any **two** characteristics that makes birds of prey suit for their mode of feeding.

- **They have a sharp hooked beak for tearing meat**
- **They have keen eyes to spot their prey at a distance**
- **They have strong talons for holding their prey.**

c) Mention the reason for birds of prey having strong eyesight.

- **To spot their prey at a distance/ / To see their prey at a distance**

48. Mention any **one** effect of AIDS on the following;

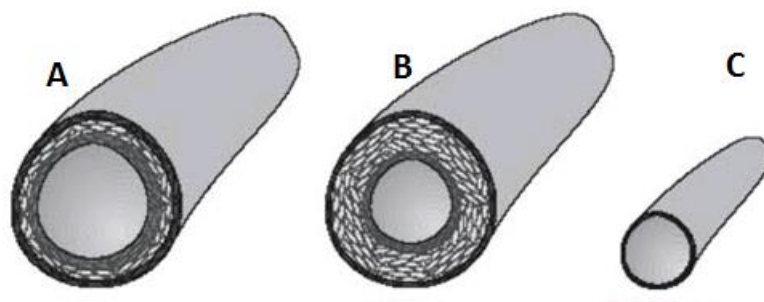
(i) Individuals

- **Weakened immunity// loss of weight//**
- **Loss of jobs//death//much worries//**
- **Depression// social isolation//stigma//Restricted movement to some areas**

(ii) family members

- **Poverty//divorce//increased stigma//**
- **Increased number of orphans//reduced family labour//**

Study the blood vessels below to answers questions that follow correctly



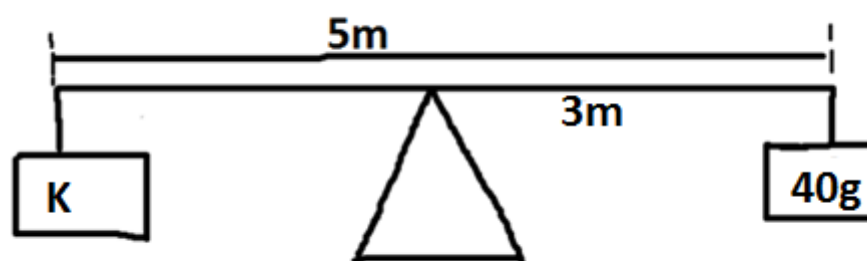
(b) State **one** structural difference between blood vessels **A** and **B**.

- **A has wide lumen while B has narrow lumen**
- **A has thin walls while B has thick walls**

(c) How is blood vessel **C** adapted to its function?

- **C has thin walls for easy diffusion of materials**

49. (a) Basing on the principle of moments, Calculate the value of K.



$$\begin{aligned} L \times LA &= E \times EA \\ K \times 2m &= 40 \times 3m \\ 2K &= 120 \\ 2K &= 120/2K \\ K &= 60g \end{aligned}$$

(b) State the principle of moments.

- **When the body has balanced, the sum of clockwise moments is equal to the sum of anticlockwise moments**

(c) How is the principle of moments applied in our daily life?

➤ **Used in weighing items using beam balances**

➤ **Used in weighing items using scale balances**

50(a) State any **two** parts of a vacuum flask that prevents heat loss by conduction.

➤ **Cork//vacuum//**

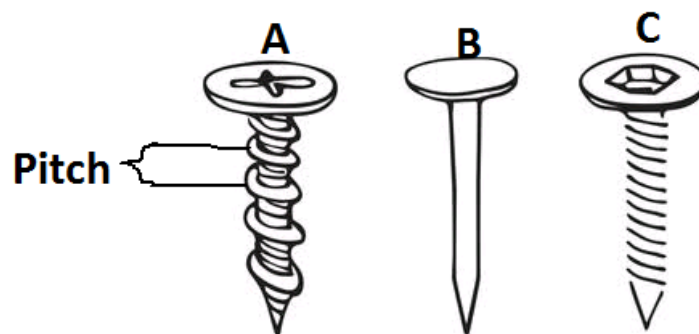
b) State the reason why sound cannot travel through a vacuum.

➤ **It has no matter// has no molecules//**

c) In which way do silvered walls of a vacuum flask prevent heat loss by radiation?

➤ **By reflecting heat from hot foodstuffs.**

Below are different simple machines of the same type, use it to answer questions that follow.



51 a) Which of the simple machines above enables people to use less effort?

➤ **Simple machine C.**

b) Provide a reason to support your answer in a) above.

➤ **It has many threads compared to other nails.**

c) To which group of simple machines do machine **A** and **C** belong?

➤ **Screws**

(d) Give the meaning of the term pitch as used in the diagram above.

➤ **Pitch is the distance between two successive threads.**

52 a) State the meaning of the term artificial insemination.

➤ **This is the deposition of semen into the vagina of a cow using a syringe.**

b) Identify any **one** instrument used to carry out artificial insemination.

➤ **Inseminating syringe.**

➤ **Inseminating gun**

c) State any **two** advantages of artificial insemination on a farm

➤ **Prevents wastage of semen**

➤ **Prevents injuries on small cows by big bulls**

➤ **Prevents inbreeding**

➤ **Prevents venereal diseases//STDS among animals.**

➤ **It is cheaper to transport semen than a bull.**

53. Complete the table below showing deficiency diseases and their causes.

| Deficiency disease | Cause |
|---------------------------|---------------------------|
| marasmus | Lack of carbohydrates. |
| Pellagra | Lack of vitamin B3 |
| Kwashiorkor | Lack of proteins |
| Beriberi | Lack of vitamin B1 |

54 (a) Briefly explain the following terms;

(i) Child spacing.

➤ **This is the act of giving enough time between births of children**

(ii) Family planning.

➤ **This is the use of birth control methods to plan when to have and not to have children**

(b) Give any **two** common disorders of the reproductive system.

In females

- **Ectopic pregnancy// barrenness//**
- **Inflammation of the oviduct//**
- **Ovarian tumour// fistula //fibroids//**

In males

- **Impotence**
- **Epididymitis// low sperm count//**
- **Orchitis//hydrocele//**

55. (a) You are provided with the following materials,

Three cardboards, lit candle and a table.

Write **four** steps you will take in an experiment to show that light travels in a straight line

- **Get three cardboards and make a hole at the centre of each**
- **Place them on a table in such a way that the holes are in a straight line**
- **Place a burning candle at one end of the cardboards**

- **Observe light from coming from the other end of the cardboard; seeing light shows how light travels in a straight line.**

Compiled by group members of '**PREPARE YOUR CHILD IN SCIENCE**'