



SUREKEY EXAMINATIONS BOARD

**PRIMARY SEVEN PLE PREP
EXAMINATIONS SET ONE**

**INTEGRATED SCIENCE
OFFICIAL MARKING GUIDE**

2022

0700-758668 / 0774-088304

SECTION A: 40 MARKS

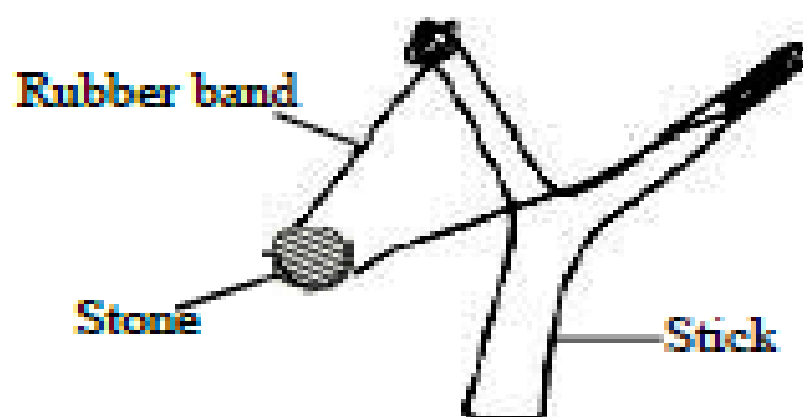
1. Name the type of chicken purposely kept for egg production.
-Layers

2. Which vector spreads yellow fever to people?
-tiger mosquito / aedes mosquito.

3. State any one use of soap in promoting personal hygiene.
-Used when bathing to remove dirt from the body.
-Used when washing hands to kill germs.
-Used when washing to remove dirt and kill germs.

4. Give any one example of a sea mammal.
-whale. -dolphin. -seal.
-dugong. - porpoise.

The diagram below shows a stone being thrown using a catapult. Use it to answer question 5.



5. What type of energy is possessed by the rubber band before the stone is released?.
-Potential energy. (*Reject kinetic energy because the rubber string moved and reached the elastic limit hence no longer moving*)

6. Which group of non-flowering plants reproduce by means of seeds?
-Coniferous plants / conifers.

7. State the type of change that enables Primary Seven pupils to burn rubbish in a rubbish pit.
-Chemical change (*Reject burning because it is a process in a chemical change*)

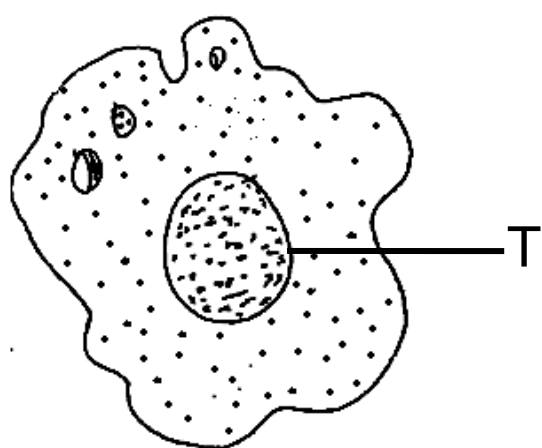
8. Mention the component of soil that enables plants to carry out photosynthesis.
-Water. (*Reject moisture because it doesn't contain hydrogen needed to make **glucose** / starch*)

9. Why is transplanting of seedlings done in the evening?
-To prevent seedlings from wilting. -To reduce the rate of transpiration.

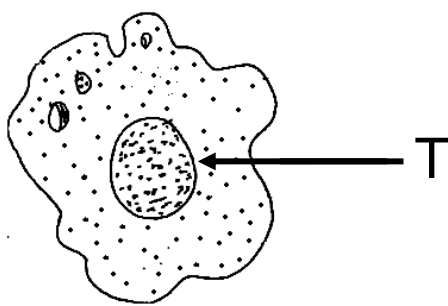
10. How are the ossicles useful during the process of hearing?

-They amplify sound vibrations.

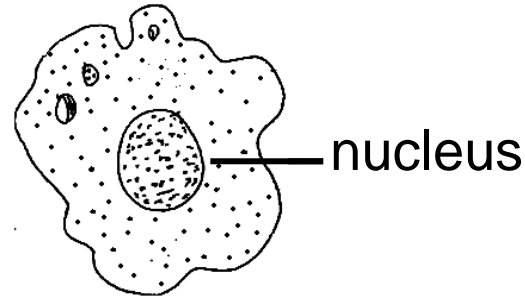
The diagram below is a white blood cell. Use it to answer questions **11** and **12**.



Reject these two alternatives



In science, arrow heads are **not** used when labeling diagrams



The question requires a learner to use letter (T) not naming the part

11. Use letter T to show the nucleus on the diagram above.

12. Give the function of the white blood cells in the body.

- Protect the body against germs.
- Defend the body against disease germs.
- Help the body to fight against pathogens.

(Reject: -Protect the body against diseases because not all diseases are Protected by the white blood cells)

Note: White blood cells only engulf, digest and produces anti-bodies against disease germs but does not fight against non-communicable diseases.

13. Write down any one activity done to keep food safe for more than one month.

- Smoking.
- Salting.
- Sun drying.
- Refrigeration.
- Freezing.
- Pickling.

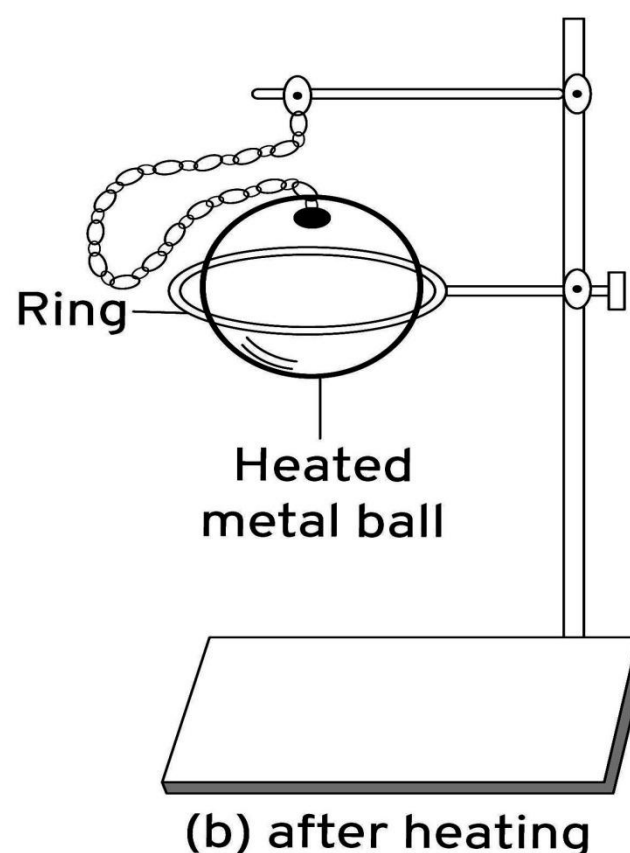
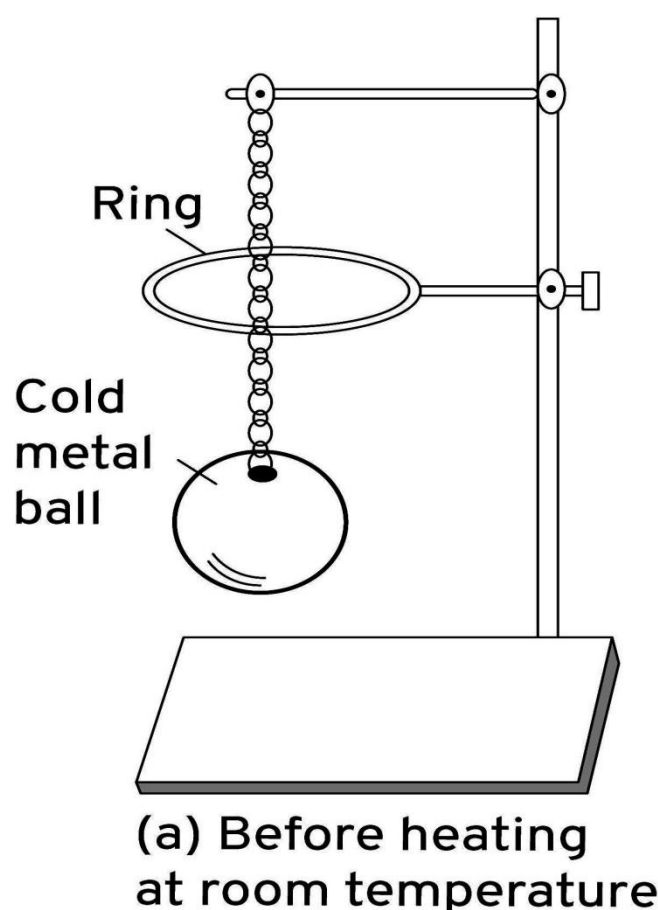
Reject: tinning // canning // steaming// burning // roasting // frying // steaming
Reason: Tinned / canned food is already preserved before being put in tins or cans for sale. The rest are ways of cooking food.

14. State any one way of controlling diarrheal diseases in the community.

- Killing houseflies and cockroaches by spraying using insecticides.
- Ensuring proper disposal of human wastes and rubbish.
- Proper use of latrines and toilets.
- Keeping latrines and toilets clean regularly.
- Encouraging people to drink boiled water.
- Destroying the breeding places for houseflies and cockroaches.

- 15. In which state of matter is smoke?**
-gaseous state // gases.
- 16. State any one primary sex change common in both adolescent boys and girls.**
-Production of gametes // Development of reproductive organs.
- 17. Give any one way in which a shopkeeper uses electricity.**
-For lighting in the shop. –For cooling drinks in the shop.
Reject: Charging people's phone batteries as it is not the main duty of the shop keeper.
- 18. How does a hyena benefit from following a lion?**
-A hyena feeds on the leftover meat (flesh) killed by a lion.
-It feeds on the leftover meat for the lions' prey.
-A hyena gets food.
- 19. State the difference in function between a tendon and a ligament at a joint.**
-A tendon attaches muscles to bones while a ligament joins bones to a bone.
-A tendon joins a muscle to a bone while a ligament joins a bone to a bone.
- 20. Give any one way in which regular medical check-ups are important to the human body.**
-Helps a person to know their health status.
-Helps a person to know their silent diseases in order to control them early.
-Helps a person to identify illness in the body.
-Helps a person to confirm whether they are free from germs.
- 21. How does debeaking help to control egg eating in chicken?**
-Makes the bird's beak blunt.
- 22. Apart from pregnant mothers, name one other group of people who are given TT vaccine.**
-Adolescent girls. (*Reject girls alone or children*)
- 23. Which cattle disease makes animals to move in circles?**
-Heart water diseases. (*Encourage learners to add the word disease especially on Heart water and Red water*)
- 24. State the importance of mucus found on the lining of the alimentary canal during digestion.**
-Lubricates the food passage.
-Prevents enzymes from digesting the walls of the ileum.

The diagrams below show two metallic ball rings. Study them and answer questions **25** and **26**.



- 25. What does the above experiment show about metals?**
-Metals expand when heated. // Expansion in solids.
- 26. Why did the metallic ball in diagram B fail to pass through the ring?**
-Due to expansion caused by heating.
-Due to increase in the size after being heated.
- 27. Why should parents stop children from eating a lot of sweets?**
-Remains of sweets attract bacteria that cause tooth decay.
-Too much sweets destroy teeth.
- 28. How does a skunk protect itself against enemies?**
-By producing bad smell.
- 29. State any one way of preventing burns and scalds at home.**
-Using insulators when carrying hot objects.
-Cooking from raised fire places.
-Keeping flammable liquids away from fire places.
-Avoid playing with fire or near hot objects.
-Putting out all fire after use.
- 30. How do energy saving stoves help to conserve wood fuel?**
-They retain a lot of heat hence use less charcoal.
- 31. State any one condition favourable for soil to support good plant growth.**
-Presence of water / air / humus /organisms.

32. How does decision making help school children to safeguard themselves against alcoholism?

- Helps them to choose good friends and clubs.
- Helps them to choose ideas which have good results.
- Helps them to overcome temptations in taking alcohol.

33. Which instrument is used to measure atmospheric pressure?

- Barometer.

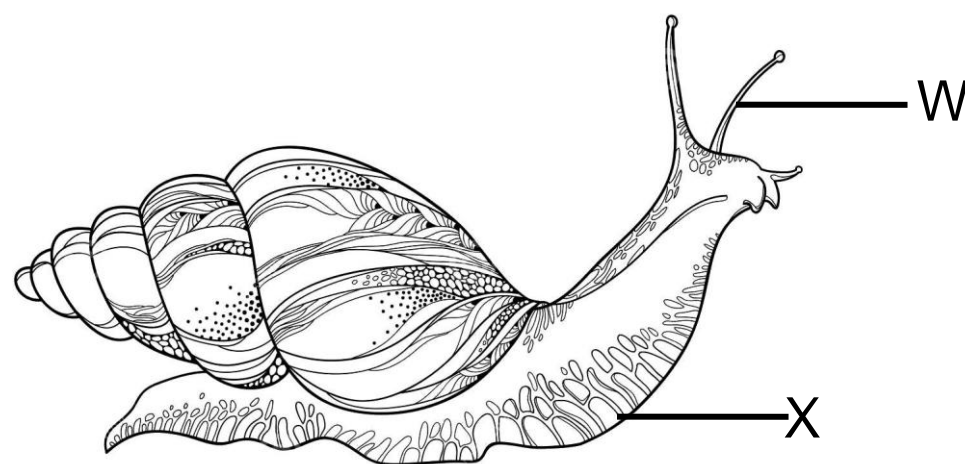
34. Give any one reason why animals move from one place to another.

- To look for food / shelter / protection / their young ones / mates / water.

35. Which group of people are easily harmed due to poor feeding?

- Vulnerable groups of people. (*Reject examples of vulnerable groups of people such as pregnant mothers, the elderly, the sick etc.*)

The diagram below is of an invertebrate in the mollusc group.
Study it and use it to answer questions **36** and **37**.



36. Name the part marked W.

- Tentacles.

37. State the function of substance marked X to the above mollusc during movement.

- Reduces friction during movement.
 - Protects the body of a snail from damage while crawling.
- (**NOTE:** Part X is called Slime)

38. Apart from the skin, give one other body organ that makes use of light energy.

- the eye / eye.

39. State any one characteristic that enables termites to build an anthill within a short period of time.

- They work together.
- They are social insects.

40.

- Total health for all.
- Accessible health services.
- Affordable health services.
- Full community participation.
- Equal care for everyone.

*Reject: Immunisation, first aid, family planning, water and sanitation.
These are elements of PHC.*

SECTION B: 60 MARKS

41.

- It is irreversible. –Forms a new substance.

(b) State two conditions necessary for rusting to take place.

- Presence of water (moisture)
- Presence of oxygen.

(c) Give any one way in which rusting is important in the environment.

- Helps to reduce metal scraps in the environment.
- Improves soil fertility by adding iron to the soil.
- Destroys soil pollutants like metals.

42.

m:d:s	m:d:s	m:-:-	d:-:-d
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(a) Identify the method of storing music shown above.

- Sol-fa notation. (*Reject notation method*)

(b) Give any one way in which music stored using the above method can be reproduced.

- Singing sol-fa notes using human voice.
- Playing the recorded sound using radio cassette players.
- Using keyboards and pianos to play music.

(c) Apart from the above method, mention any one other method of storing music.

- staff notation.

(d) State the difference between pitch and volume of sound.

- Pitch is the highness or lowness of sound while Volume is the loudness or softness of sound.

43.

(a) Give the importance of carrying out each of the following practices in sheep keeping.

(i) hoof trimming.

- Reduces the risk of injuries in sheep.
- Reduces the risk of spread of diseases
- Reduces foot rot disease among sheep.

(ii) docking.

-Allows easy mating /makes mating easy / eases mating.

(Reject: Removes hiding places for parasites / Easy distribution of fats in the body.

(b) State any two ways of controlling tick borne diseases in sheep.

-Double fencing. –Deticking sheep. –Establishing tick buffers.
Paddockding.(Rotational grazing)

-Dipping sheep in acaricides. –Sprayng sheep using acaricides.

44. (a) Write down any two causes of soil exhaustion.

-Mono cropping. –Monoculture. –Over cultivation.

-Leaching. –Overgrazing. –Soil erosion.

-Over use of artificial fertilizers.

(b) Give any one characteristic that makes clays soil suitable for making ceramics.

-It has fine smooth particles.

-It is sticky and heavy when wet.

(c) Apart from making ceramics, state any one other way in which clay soil is useful to people.

-Used for making bricks for building.

-Used for making tiles for building.

-Suitable for rice, yams and sugarcane growing.

Reject: Used for pottery because pots are one of the examples of ceramics.

45. The table below shows parts of a flower and their functions but in wrong order.

Part of a flower	Function of the part
(i) Sepal	receives pollen grains during pollination.
(ii) Anther	attracts insects for pollination
(iii) Stigma	protects the flower during bud stage
(iv) Petal	produces pollen grains.

Match the parts of a flower in the table above with their functions correctly.

(i) Sepal -protects the flower during bud stage.

(ii) Anther -produces pollen grains.

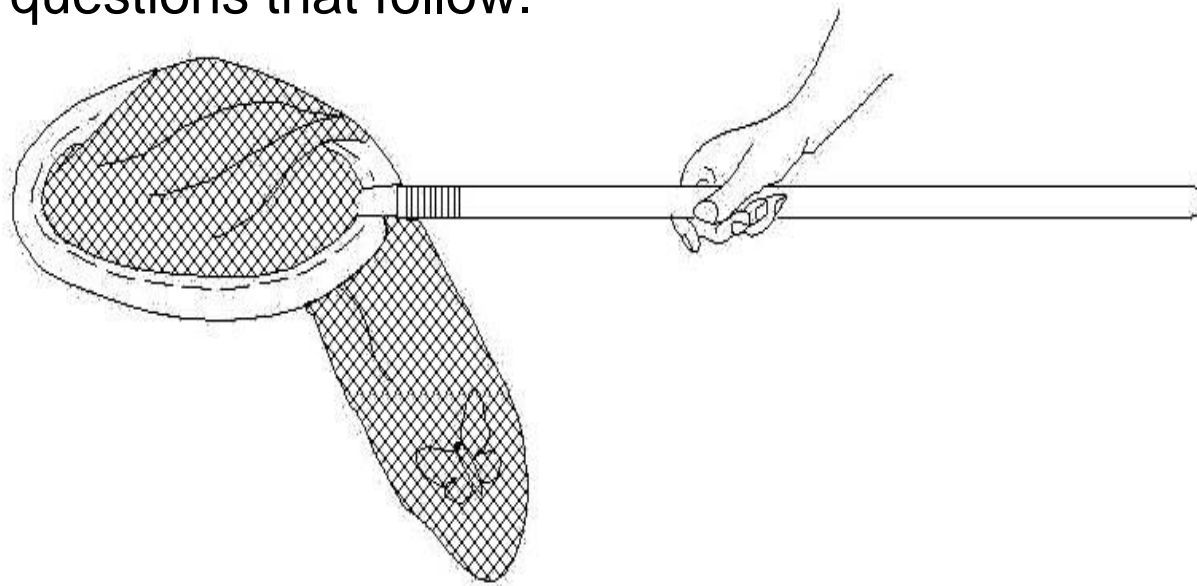
(iii) Stigma -receives pollen grains during pollination.

(iv) Petal -attracts insects for pollination.

- 46.**
- (a) In which way does severe diarrhea lead to dehydration?**
-It leads to loss of body fluids.
 - (b) State the importance of sugar when preparing Oral Rehydration Solution (ORS).**
-Replaces the lost energy in the body of the patient.
-Sugar is a source of energy.
 - (c) Apart from giving Oral Rehydration Solution, state any two other ways of rehydrating a patient with severe diarrhea.**
-Give the patient extra fluids like juice to drink.
-Using strips.

- 47.**
- (a) Name the group of crops to which each of the following crops belongs.**
 - (i) bean crops** -Leguminous crops / legumes.
 - (ii) rice crops** -Cereal crops / cereals.
 - (b) Give any two ways in which weeding is done in the garden.**
-Uprooting. -Digging. -Spraying using herbicides.
-Slashing weeds. -Using herbivores to eat up weeds.

- 48.** The diagram below is of an equipment used in bee keeping. Use it to answer the questions that follow.



- (a) Name the equipment in the diagram above.**
-Swarm catching net. -Bee trapper.
- (b) How is the above equipment useful to a bee keeper?**
-Used to trap hanging swarm and carry it to the hive.
- (c) What activity in bee keeping involves the use of the above equipment?**
-Stocking a hive / bee stocking.
- (d) Give any one reason why honey does not go bad yet it is food.**
-It has very low water content for the survival of microbes / germs.
-Its acidic nature cannot allow the growth of germs.

49.

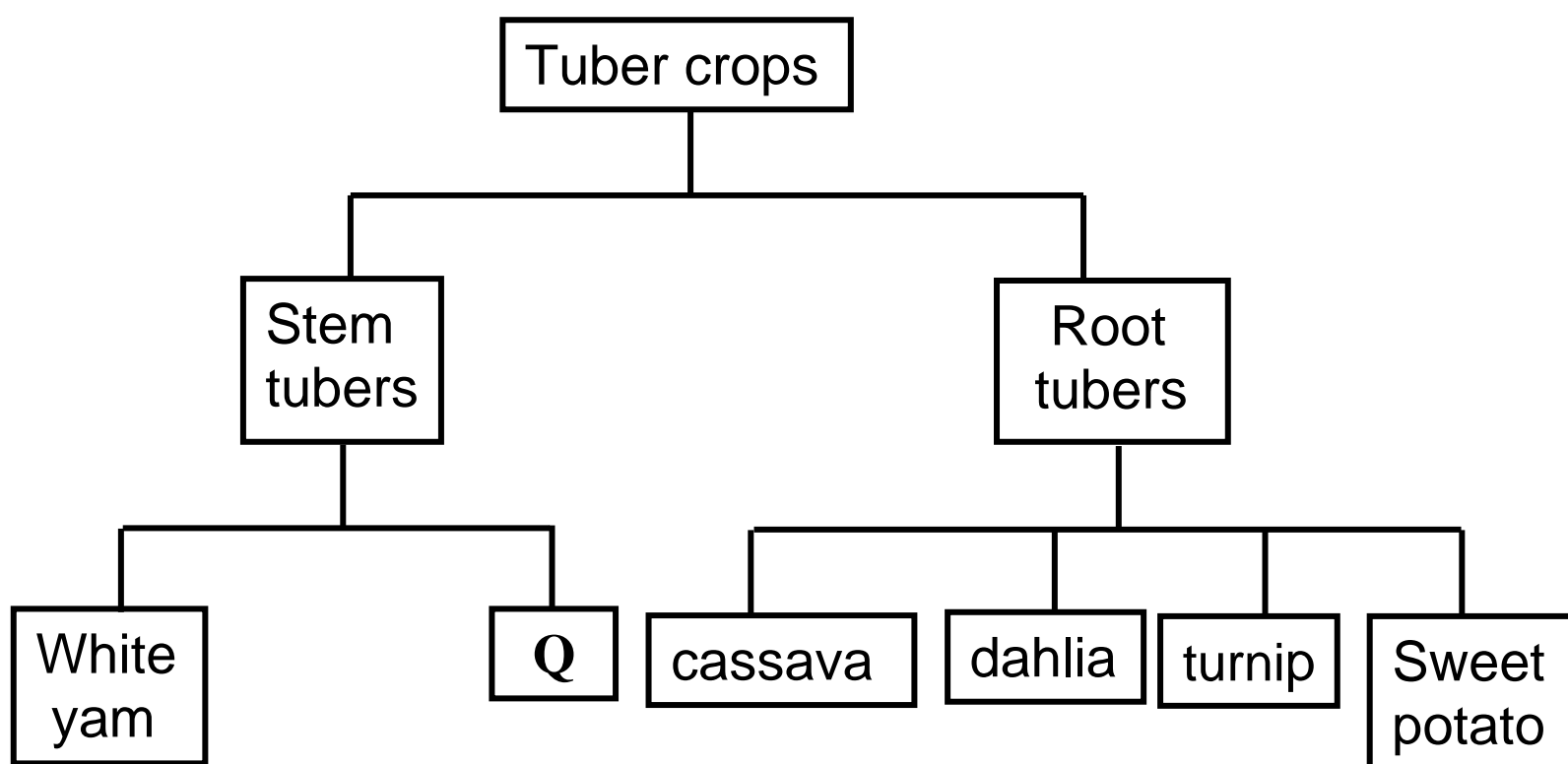
- (a) **State the role of yeast during fermentation of alcohol.**
 -Produces **zymase** that speeds up the rate of fermentation.
- (b) **Apart from fermentation of alcohol, give any two other way in which yeast is useful to people.**
 -Yeast is used to give flavor to cheese.
 -Yeast is used when baking bread.
 -Yeast is a source of Vitamin B1
- (c) **Which fungus is used to make antibiotic drugs?**
 -Penicillium mould (*Reject mould alone*)

50.

- (a) **Give the importance of each of the following in a home,**
 (i) **a rubbish pit** -For proper disposal of rubbish.
 (ii) **a rack** -For proper drying of washed utensils and cutlery
- (b) **Mention any two other sanitary items that a home should have.**
 -Clean toilet / latrine. -Clean kitchen.
 -Clean bathroom. -Animal houses.
 -Hand washing facilities.
 (*Reject dustbin*)

51.

The flow chart below shows groups of tuber crops. Study and use it to answer the questions that follow.



- (a) **Name the example of stem tuber marked Q.**
 -Irish potato. (*Reject coco yam*)
- (b) **State any one characteristic common to all root tubers.**
 -Have swollen underground roots. -Contain starch.
 -Store food in the swollen underground roots.
 -Are annual crops.

- (c) **In which way is the propagation of cassava different from that of a white yam?**
 -Cassava is propagated by planting stem cuttings while a white yam is propagated by planting its stem tuber.
- (d) **Why is a sugarcane plant not grouped under stem tubers yet it stores its food in the stem?**
 -It does not store food in its swollen underground stem.
 -Its food storage is not found underground.

52.

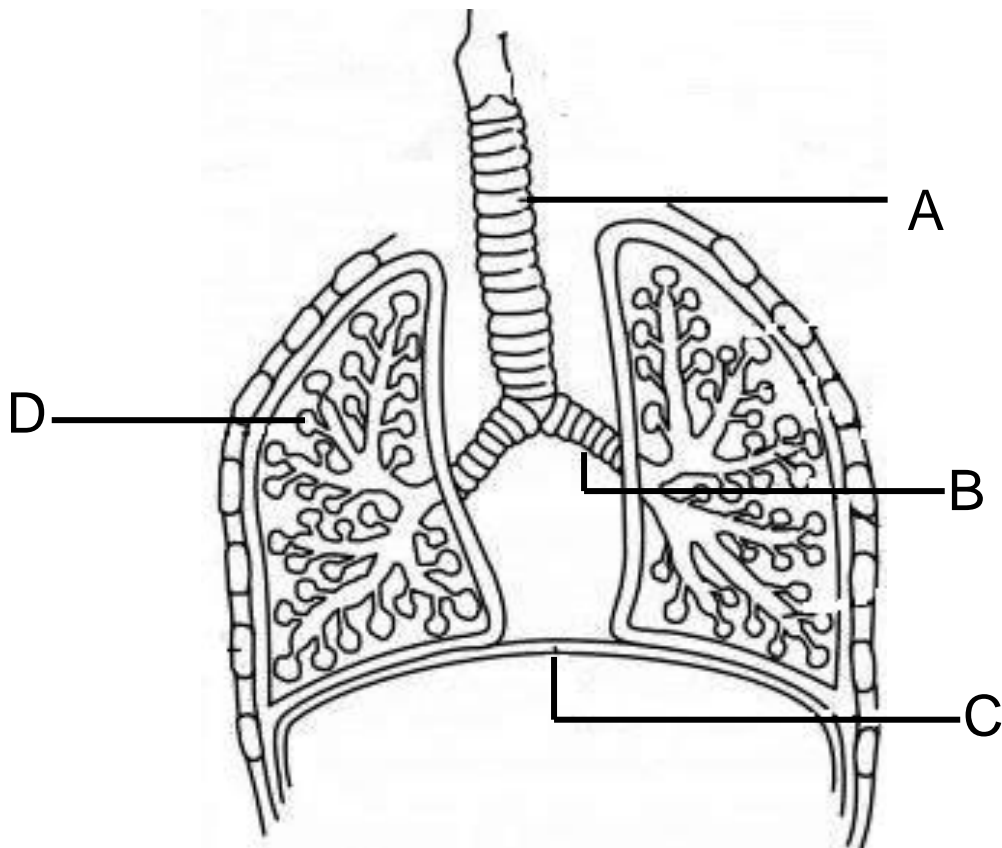
- (a) **In which way is the function of a fuse different from that of a switch in an electric circuit?**
 -A fuse breaks the circuit in case of high voltage
 While a switch breaks or completes the circuit at the user's will.
- (b) **Apart from a fuse and a switch, write down any two other components of an electric circuit.**
 -Electric bulb. -Drycell. -Ammeter. -
 -Conducting wire. -Battery.
- (c) **State the main reason why the tungsten filament of an electric bulb is coiled.**
 -To increase electrical resistance.
(Reject: to fit in the glass envelope and to increase electric resistance)

53.

- (a) **State any one way in which rocks contribute to the development of an area.**
 -Rocks are used for building houses.
 -Rocks are used for constructing roads.
 -Rocks are sources of minerals used in industries.
- (b) **Apart from rocks, name any one other example of a non-renewable resource in the environment.**
 -Fossil fuels / fossils. -Minerals.
- (c) **State any two ways of conserving non-renewable resources in the environment.**
 -By using renewable energy resources.
 -Harvesting and using them sparingly.
 -Recycling and re-using metallic wastes.
 -Using alternative sources of energy.

54.

The diagram below shows a human respiratory system. Study it carefully and use it to answer the questions that follow.



- (a) Name the parts marked B and C.**
- (i) B** -Bronchus. (Reject: Bronchiole.)
 - (ii) C** -Diaphragm.
- (b) What process takes place in part marked D?**
- Gaseous exchange.
- (c) State any one way in which part marked A is adapted to its Function.**
- It is made up of rings of cartilage to keep it open all the time.
 - It has cilia that traps germs and dust.

55.

- (a) State any one cause of rickets in children.**
- Lack of Vitamin D in the body.
- (c) Write down any two signs of rickets in a child.**
- Weak bones. -Bow- shaped legs.
-Knock knee bones. -Poor teeth formation
-Swollen and soft bones.
- (b) Give any one example of food you would give to a child to protect him/her against rickets.**
- butter. -Milk. -cheese. -egg yolk. -liver.
-fish liver oil. -margarine.
- (Reject: Morning sunshine or sunlight)*

END