

# BROAD EXAMINATIONS

## P.7 INTEGRATED SCIENCE EXAMINATION

### PRE-PLE TRIAL SET II 2024

Time allowed: 2 hours 15 minutes.

Random No.	Personal No.

Candidate's Name: .....

Candidate's Signature: .....

District Name: .....

Read the following instructions carefully:

1. This paper is made up of two sections: A and B.
2. Section A has 40 questions (40 Marks)
3. Section B has 15 questions (60 Marks)
4. Answer ALL questions in both sections A and B.
5. All answers must be written in the space provided in blue or black ball point pens and ink. Only diagrams should be done in pencil.
6. Unnecessary crossing of answers will lead to loss of marks.
7. Any handwriting, which cannot be easily read, may lead to loss of marks.
8. Do not fill anything in the boxes indicated for Examiners' use only.

FOR EXAMINERS' USE ONLY		
PAGES	MARKS	SIGN
Page 2		
Page 3		
Page 4		
Page 5		
Page 6		
Page 7		
Page 8		
TOTAL		

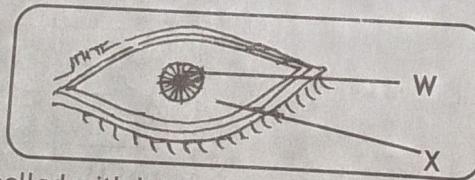
Teacher's comment to the learner

Approved by:  
*A. M. S.*  
Team Head Science Department

**SECTION .A. (40 MARKS)**

1. Name any one material used to maintain oral hygiene.
2. In which one way are joints useful in the human body?
3. Where does a cassava plant store most of its food?
4. How do poultry farmers reduce boredom among poultry in a deep litter poultry house?
5. Name the group of cold blooded vertebrates which can live on land but breed from water.
6. Mention any one example of root tuber crop pests.
7. What kind of advice would you give to a mother whose child is suffering from marasmus?
8. What type of electricity is produced from burning uranium?
9. Why can't sound energy pass through a vacuum?

The diagram below is of the front view of the human eye. Use it to answer questions 10 and 11.



10. Name part labelled with letter X.
11. How does part labelled with letter W behave in dim light?
12. What do we call the non-sterile female bees in the bee hive?
13. Give one importance of valves in the human heart.

48. (a) Ho

(b) W

(c) N

(i) -

(ii) -

The

49. (

)

5

2

22

23.

24.S

25.G

14. In which one way do plants depend on insects in the environment?

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48. (a)

15. What do we call the turning of glucose added to water into alcohol?

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(b)

16. State the importance of the thread in carrying displacement method to determine volume of irregular objects.

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(c)

(i)

(ii)

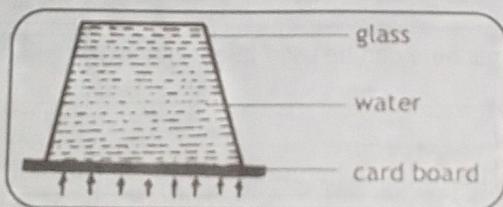
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17. Why is it not advisable to open soda bottles using teeth?

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49

The diagram below is about the properties of air. Use it to answer question 20.



20. State any one use of the above property in our daily life.

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21. What name is given to small hairs found in the human nose?

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22. How does castration help to control inbreeding on a farm?

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23. Mention one way of acquiring artificial immunity.

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24. Suggest any one way wind can be used as an energy resource.

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25. Give a reason why there is no digestion of fats in the stomach.

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26. State any one way of conserving minerals as resources.

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27. State the function of sweat glands found in the human skin.

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28. Name the living component of soil.

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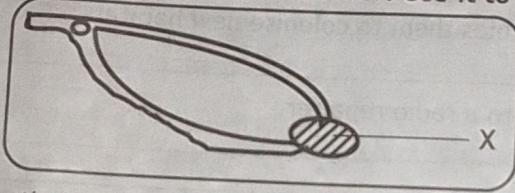
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29. How is respiration important to the human body?

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The diagram below shows a lever. Use it to answer questions 30 and 31.



30. Name the machine shown above.

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31. Suggest any one way the above machine can be used in our homes.

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32. Why is it advisable to first clean the water to be used for washing clothes?

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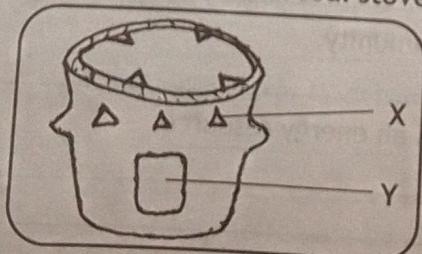
33. Name the intestinal worms which enter into the human body through eating undercooked pork.

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34. State one first aid you would give to a person that has been chocked with food.

The diagram below shows a charcoal stove. Use it to answer question 35.



35. How are holes marked with letters X and Y different in terms of air flow?

36. N

37. W

a

38. H

39. A

d

40. N

41. (a)

(i)

(ii)

(b)

(i)

(ii)

42. (a)

(b)

(i)

(ii)

(c)

T

43. (a)

(i)

38. How is a screen found on a VIP latrine important?

39. Apart from having parachute like structures, give one other adaptation of seeds dispersed by wind.

40. Name the mode of feeding common in most fungi.

#### SECTION. B. (60 MARKS)

41. (a) Name two vectors which spread diseases using their hairy body.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(b) Mention any two ways of controlling the vectors you have named above at home.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

42. (a) How are liquids similar to gases in terms of heat transfer?

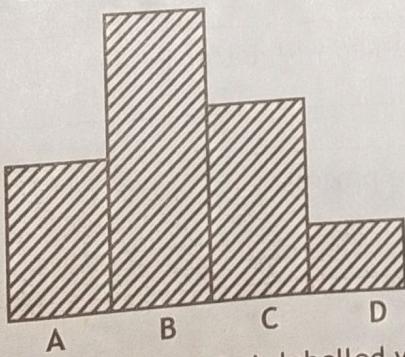
(b) Mention any two natural sources of heat energy in the environment.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(c) State any one use of heat to people.

The diagram below shows parts of air. Use it to answer question 43.



43. (a) Name the parts of air labelled with letters A and D.

(i) A \_\_\_\_\_

(ii) D \_\_\_\_\_

(b) State the use of each of the parts labelled B and C to man;

(i) B \_\_\_\_\_

(ii) C \_\_\_\_\_

44. (a) Give any one example of each of the following tuber crops;

(i) stem tuber \_\_\_\_\_

(ii) root tuber \_\_\_\_\_

(b) How are turnips propagated?

\_\_\_\_\_

(c) What food value is obtained from most tuber crops?

\_\_\_\_\_

45. (a) Give any two ways accidents can be dangerous to a person's health.

(i) \_\_\_\_\_

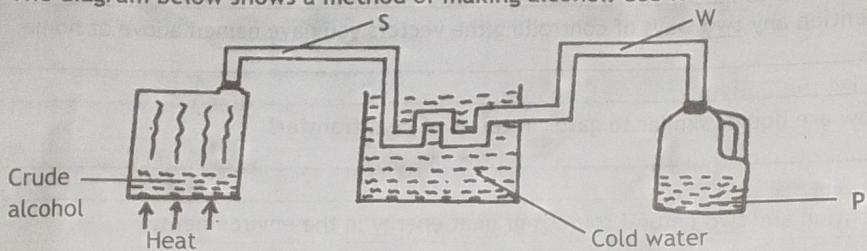
(ii) \_\_\_\_\_

(b) State the importance of each of the following in giving first aid;

(i) splint \_\_\_\_\_

(ii) tourniquet \_\_\_\_\_

The diagram below shows a method of making alcohol. Use it to answer question 46.



46. (a) Name the method illustrated in the diagram above.

(b) In which state of matter is the substance at point S in the diagram above?

\_\_\_\_\_

(c) What scientific name is given to substance marked with letter P?

\_\_\_\_\_

(d) What role is played by cold water in the above process?

\_\_\_\_\_

47. (a) What do we call a male mature rabbit?

\_\_\_\_\_

(b) Give any two examples of exotic breeds of rabbits.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(c) State any one way of caring for rabbits.

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48. (a) How is a flow

(b) Which part c

(c) Mention any

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

The diagram b

W

49. (a) Name par

(i) W \_\_\_\_\_

(ii) X \_\_\_\_\_

(b) Give the f

(c) Under whi  
circuit?

50. (a) Give a re

(b) What im

(c) Name th

(d) Give an

51. (a) Write

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(b) Why a

(c) What

46. (a) Which part of a flower is more important to a plant?

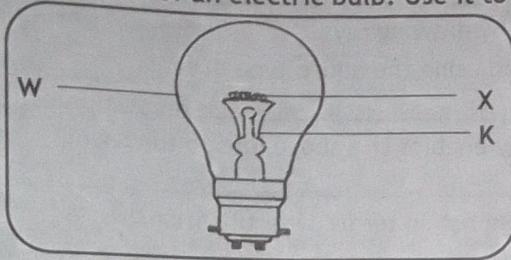
(b) Which part of a flower develops into a fruit after fertilization?

(c) Mention any two characteristics of insect pollinated flowers.

(i)

(ii)

The diagram below is of an electric bulb. Use it to answer question 49.



46. (a) Name parts labelled with letters X and W on the diagram above.

(i) W \_\_\_\_\_

(ii) X \_\_\_\_\_

(b) Give the function of part X in an electric bulb?

(c) Under what condition can electric bulb fail to work when connected to a complete circuit?

50. (a) Give a reason why the liver is regarded as an excretory organ.

(b) What important process takes place in the cortex of the kidneys?

(c) Name the condition which results from lack of melanin in the human skin.

(d) Give any one excretory product of human lungs.

51. (a) Write down any two crafts got from clay.

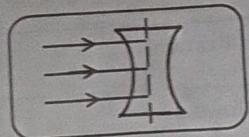
(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(b) Why are crafts made from clay first heated before use?

(c) What general name is given to crafts made from clay?

The diagram below shows a lens. Use it to answer question 52.



52. (a) Name the lens shown in the diagram above.

(b) Complete the above diagram by drawing rays.

(c) Name the eye defect corrected using the above type of lens.

(d) Which property of light energy enables the above lens to function?

53. (a) How are reptiles different from fish in terms of fertilization?

(b) Apart from the mode of reproduction, give any two other characteristics used to classify animals.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(c) Name the structures fish use to breathe.

54. (a) Mention any two methods used to prepare safe water for drinking.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(b) Why should safe water be kept in clean containers?

(c) What do we call a group of diseases that are spread through drinking contaminated water?

55. Given the list of organisms below;

Rat, Cassava, Eagle, Bacteria

(a) Rearrange the organism above to create a food chain.

(b) What scientific name is given to the following organisms;

(i) rat? \_\_\_\_\_

(ii) eagle? \_\_\_\_\_

(c) Write down the role of bacteria in any food chain.

END

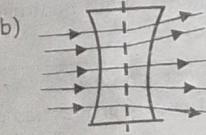
N	CORRECT ANSWER(S)	CLASS	RELATED CONTENT
1.	Toothbrush/toothpaste/dental floss/clean water/soft stick	P.4	<ul style="list-style-type: none"> <li>- Parts of a tooth</li> <li>- Functions of parts</li> </ul>
2.	Joint allow movement in the body/enable the body to bend	P.7	<ul style="list-style-type: none"> <li>- Structure of the skeleton</li> <li>- Parts and functions</li> </ul>
3.	In roots	P.5	<ul style="list-style-type: none"> <li>- Examples of stem tubers</li> <li>- Diseases that attack tuber crops</li> </ul>
4.	Hanging green leafy vegetables in a coop/putting perches in a coop/putting litter in a coop.	P.5	<ul style="list-style-type: none"> <li>- Systems of rearing poultry</li> <li>- Their advantages and disadvantages</li> </ul>
5.	Amphibians	P.6	<ul style="list-style-type: none"> <li>- Classification table of animals</li> <li>- Examples and their characteristics</li> </ul>
6.	Eelworms/mole rats/rats/ squirrels/ caterpillars/ monkeys	P.5	<ul style="list-style-type: none"> <li>- Characteristics of root tuber crop pests.</li> <li>- How to control root tuber crops.</li> </ul>
7.	I encourage the mother to feed her child on carbohydrate rich foods.	P.4	<ul style="list-style-type: none"> <li>- Signs of marasmus</li> <li>- Signs of kwashiorkor</li> </ul>
8.	Nuclear (atomic) electricity	P.7	<ul style="list-style-type: none"> <li>- Other types of alternating current electricity</li> <li>- Advantages of using electricity</li> </ul>
9.	There is no medium of sound transmission in vacuum	P.6	<ul style="list-style-type: none"> <li>- Properties of sound</li> <li>- Experiment under sound</li> </ul>
10.	Cornea	P.7	<ul style="list-style-type: none"> <li>- Structure of the human eye</li> <li>- Parts and functions</li> </ul>
11.	It relaxes	P.7	<ul style="list-style-type: none"> <li>- Eye defects</li> <li>- Causes and prevention</li> </ul>
12.	Queen bee	P.5	<ul style="list-style-type: none"> <li>- Parts of a worker bee</li> <li>- Materials used to make honey</li> </ul>
13.	Valves prevent the backflow of blood	P.6	<ul style="list-style-type: none"> <li>- Structure of the heart</li> <li>- Parts and functions</li> </ul>
14.	Some insects pollinate flowers.	P.7	<ul style="list-style-type: none"> <li>- Meaning of interdependence</li> <li>- Food chain and its components</li> </ul>
15.	Fermentation	P.6	<ul style="list-style-type: none"> <li>- Factors that lead to alcoholism</li> <li>- Effects of alcoholism</li> </ul>
16.	It helps to lower the irregular object gently into water.	P.5	<ul style="list-style-type: none"> <li>- Instruments used in displacement method</li> <li>- Density, mass and volume</li> </ul>
17.	Teeth may break.	P.4	<ul style="list-style-type: none"> <li>- Diseases of teeth</li> <li>- Disorders of teeth</li> <li>- How to care for teeth</li> </ul>
18.	Seed or fruit dispersal	P.6	<ul style="list-style-type: none"> <li>- Characteristics of fruits dispersed by wind</li> <li>- Disadvantages of seed /fruit dispersal</li> </ul>

19.	Magnets help a radio repairer to hold (keep) small nails	P.7	<ul style="list-style-type: none"> <li>- Properties of magnets</li> <li>- Uses of magnets</li> </ul>
20.	It helps people to inflate car tyres with a pump/it helps children to play with kites/it helps doctors to suck medicine using a syringe	P.3	<ul style="list-style-type: none"> <li>- Components of air</li> <li>- Uses of components</li> </ul>
21.	Cilia	P.6	<ul style="list-style-type: none"> <li>- Respiratory organs</li> <li>- Their functions</li> </ul>
22.	It prevents unwanted pregnancies among closely related animals.	P.6	<ul style="list-style-type: none"> <li>- Methods used in castrating animals</li> <li>- Dangers of castration</li> </ul>
23.	Immunization	P.5	<ul style="list-style-type: none"> <li>- Meaning of immunity</li> <li>- Ways of acquiring natural/artificial immunity</li> </ul>
24.	It helps to move kites/boats/it helps to turn windmills to produce electricity	P.7	<ul style="list-style-type: none"> <li>- Meaning of energy resource</li> <li>- How to conserve energy resources.</li> </ul>
25.	There is no enzyme in the stomach to act upon fats	P.7	<ul style="list-style-type: none"> <li>- Structure of the human alimentary canal</li> <li>- Digestive juices</li> </ul>
26.	Recycling metal scraps/painting metallic objects/making alloys/using them sparingly	P.6	<ul style="list-style-type: none"> <li>- Meaning of renewable resources and non-renewable resources</li> </ul>
27.	They produce sweat that helps to cool the body.	P.7	<ul style="list-style-type: none"> <li>- The human skin</li> <li>- Parts and functions</li> </ul>
28.	Soil living organisms	P.5	<ul style="list-style-type: none"> <li>- Soil profile</li> <li>- Types of soil</li> <li>- Properties of soil</li> </ul>
29.	It helps the human body to produce energy	P.6	<ul style="list-style-type: none"> <li>- Why people breathe faster when running</li> <li>- Percentages of air inhaled</li> </ul>
30.	Tweezers/pair of tongs	P.4	<ul style="list-style-type: none"> <li>- Causes of accidents</li> <li>- Injuries and their first aid</li> </ul>
31.	It is used to hold cotton wool when cleaning wounds/it helps people to hold sugar crystals	P.4	<ul style="list-style-type: none"> <li>- Other tools used in giving first aid</li> <li>- Their functions</li> </ul>
32.	To prevent staining of clothes.	P.6	<ul style="list-style-type: none"> <li>- Steps taken in cleaning clothes</li> <li>- Why people sort clothes</li> </ul>
33.	Tapeworms	P.4	<ul style="list-style-type: none"> <li>- Other intestinal worms</li> <li>- Signs and symptoms of certain intestinal worms</li> </ul>
34.	Giving a sharp blow at the victim's back	P.6	<ul style="list-style-type: none"> <li>- Fainting</li> <li>- Causes</li> <li>- Major cause</li> </ul>
35.	Holes marked with letter X take out stale air while holes marked with letter Y bring in air fresh	P.5	<ul style="list-style-type: none"> <li>- Heat transfers</li> <li>- Their applications</li> </ul>
36.	Carbon dioxide	P.4	<ul style="list-style-type: none"> <li>- Conditions necessary for photosynthesis</li> </ul>

37.	Paraffin may cause more damage to the throat.	P.6/P.4	<ul style="list-style-type: none"> <li>- Importance of photosynthesis</li> <li>- Meaning of poisoning</li> <li>- Signs of a person that has taken poison into the body</li> </ul>
38.	It traps houseflies until they die.	P.7	<ul style="list-style-type: none"> <li>- Types of latrines</li> <li>- Disadvantages of using toilets</li> </ul>
39.	They are small and light to be easily taken by wind/some seeds have tuft of hair to easily float in wind/some seeds have wing like structures to easily float in wind.	P.6	<ul style="list-style-type: none"> <li>- Classifications table of plants</li> <li>- Their examples and characteristics</li> </ul>
40.	Saprophytic feeding	P.5	<ul style="list-style-type: none"> <li>- Examples of useful fungi.</li> </ul>

#### SECTION B

41.	(a) Cockroaches/houseflies (b) Proper disposal of wastes/sweeping rubbish regularly/spraying using insecticides	P.4/P.3	<ul style="list-style-type: none"> <li>- Meaning of a vector</li> <li>- How vectors spread disease causing germs</li> </ul>
42.	(a) Both liquids and gases allow heat to travel through them by convection. (b) Sun/stars/erupting volcanoes/hot springs	p.5	<ul style="list-style-type: none"> <li>- Uses of heat energy</li> <li>- Experiments about heat and temperature</li> </ul>
43.	(a) (i) rare gases (ii) carbon dioxide (b) (i) It helps to preserve semen (ii) it helps man to respire	P.3	<ul style="list-style-type: none"> <li>- Uses of carbon dioxide</li> <li>- Applications of properties of air</li> </ul>
44.	(a) (i) White yams/Irish potatoes (ii) Cassava/beetroots/turnips/radishes/sweet potatoes	P.5	<ul style="list-style-type: none"> <li>- Parts of an Irish potato</li> <li>- How to propagate tuber crops</li> </ul>
45.	(a) Accidents lead to blindness/lameness/brain damage/missing of body parts (b) Splints hold the broken bone in one position (ii) It is used to tie slightly above the bitten part when giving first aid for snake bites	P.4	<ul style="list-style-type: none"> <li>- Meaning of an accident</li> <li>- Differences between first aid kit and first aid box</li> <li>- Qualities of a good first aider</li> </ul>
46.	(a) Distillation (b) Gaseous state (c) Distillate (d) It condenses the alcohol vapour.	P.6	<ul style="list-style-type: none"> <li>- Factors that lead to alcoholism</li> <li>- Effects of alcoholism to a pregnant mother</li> </ul>
47.	(a) Buck (b) Chinchilla/California/Rex/Angora/Flemish Giant/Ear lop/Dutch (c) Feeding the properly/vaccinating them/treating sick rabbits	P.4	<ul style="list-style-type: none"> <li>- Diseases that attack rabbits</li> <li>- Their signs and symptoms</li> </ul>
48.	(a) It enables a plant to reproduce (b) Ovary	P.4	<ul style="list-style-type: none"> <li>- Meaning of pollination</li> <li>- Types of pollination</li> </ul>

	(c) They have scent/brightly coloured petals/few pollen grains/they are large in size		- Characteristics of wind pollinated flowers
49.	(a) (i) Glass envelope (ii) lead wire (coiled filament wire) (b) It converts electrical energy to heat and P.7 light energy (c) When the glass envelope is broken/when it's blown/when the dry cells are exhausted	P.7	- Natural sources of electricity - Types of cells - Structure of a dry cell - Parts and functions
50.	(a) It helps to remove bile pigments from the body. (b) Blood filtration (c) Albinism (d) Carbon dioxide/water vapour	P.7	- Structure of lungs - Naming all the parts - What happens to parts during inhalation
51.	(a) Pots/plates/cups/tiles/flower vases (b) To make them harder (c) Ceramics	P.2/3	- Meaning of technology - Importance of technology
52.	(a) Concave lens  (b)   (c) Short sightedness (Myopia) (d) Light can be refracted.	P.7	- Lens camera (diagram) - The human eye (parts) - Pinhole camera
53.	(a) Reptiles lay internally fertilized eggs while fish lay externally fertilized eggs. (b) Mode of breathing/mode of feeding/type of feet and beaks (c) Gills	P.6	- Parts of a fish - Functions of parts - Adaptations of fish to living in water - Examples of water borne diseases
54.	(a) UV treatment/boiling/chemical treatment (b) To prevent it from getting contaminated (c) Water borne diseases	P.6	- Methods used to clean water - Examples of water borne diseases
55.	(a) Cassava → Rat → Eagle → Bacteria (b) (i) Primary consumer (ii) Secondary consumer (c) They help in decomposition	P.7	- What is food chain - Components of food chain

END