



BROAD EXAMINATIONS®

P.7 INTEGRATED SCIENCE EXAMINATION

PRE-PLE TRIAL SET II 2023

Time allowed: 2 hours 15 minutes.

Random No.	Personal No.

Candidate's Name:.....

Candidate's Signature:.....

School 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.

Teacher's comment to the learner

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**FOR EXAMINER'S
USE ONLY**

PAGES	MARKS	SIGN
Page 2		
Page 3		
Page 4		
Page 5		
Page 6		
Page 7		
Page 8		
TOTAL		

Approved by:

Team Head Science Dept.

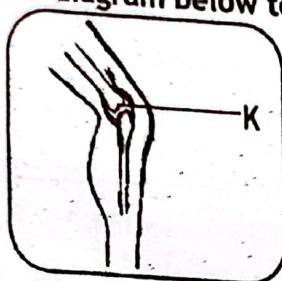
PLE REVISION TIPS FOR SELF STUDY

Write down what you know and understand on these topics of P.5 term 1; Poultry and bee keeping/Immunity and immunisation/Measurements/Digestive system

SECTION .A. (40 Marks)

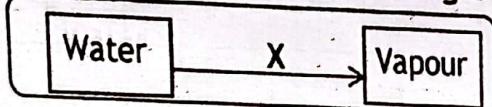
1. Name the diarrhoeal disease that shows the sign of blood stained watery stool.
2. Give any one reason why a rabbit hutch should be properly roofed.
3. Mention any one structure used by plants with weak stems to climb other plants.
4. Write down any one sign of heat period in cows.

Use the diagram below to answer question 5.



5. Name the type of movable joint found at part marked K.
6. What reason do people give for wringing washed clothes before sun drying?
7. State the function of sweat glands found in the human skin.

Use the diagram below about changes of states of matter to answer question 8.



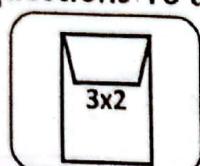
8. What causes the change of state of matter marked X?
9. Give one reason for carrying out docking in sheep management.
10. State the difference in function between the semicircular canals and the eustachian tube of the human ear.
11. Name the vitamin that is needed in the human body for making bones strong.
12. Why does hot porridge cool faster in a metallic cup than a plastic cup?
13. Mention any one way in which soil loses its fertility.
14. What name is given to a band of seven distinct colours of a rainbow?

NQ	CORRECT ANSWER(S)	CLASS	RELATED CONTENT
1.	dysentery	P.4	- Meaning of diarrhoeal diseases - How they spread
2.	To protect rabbits from rain water	P.4	- Breeds of rabbits - Disease that affect rabbits
3.	tendrils/hooks	P.4	- Types of plant stems - Functions of stems to plants
4.	Frequent urination/mucus discharge from the vagina/the colour of the vulva turns from pink to red/rise in body temperature.	P.6	- Meaning of heat period - Ways of breeding cattle
5.	Hinge joint	P.7	- Types of joints characteristic joints
6.	To reduce the amount of water in the clothes which eases drying.	P.6	- Other steps taken in cleaning - Methods of cleaning water
7.	Sweat glands secrete sweat.	P.7	- Structure of the human skin - Functions of parts
8.	Heat gain	P.5	- Meaning of heat energy - Effects of heat loss
9.	Docking eases mating in sheep.	P.5	- Meaning of flushing in sheep - Advantage of flushing
10.	Semicircular canals are used for body balance while eustachian tube equalises (balances) air pressure inside the ear with atmospheric pressure.	P.6	- The human ear - Parts and functions
11.	Vitamin D	P.4	- Use of vitamin D in the body - Deficiency diseases
12.	A metallic cup is a good conductor of heat while a plastic cup is a bad conductor of heat.	P.5	- Experiments on heat energy - Heat transfers
13.	Through monocropping/soil erosion/overcultivation/etc	P.5	- Meaning of soil fertility - Soil exhaustion
14.	Spectrum	P.7	- How a rainbow is formed
15.	Hardening off enables seedlings to get used to harsh weather conditions.	P.7	- Activities done in hardening off - Importance of a nurse
16.	Drug prescription	P.6	- Essential drugs - Lab. Manufactured drugs
17.	It prevents sick people from taking overdose/underdose.	P.6	- Drug dependence - Examples of narcotic drugs
18.	Poultry provide eggs which are a source of proteins that prevent kwashiorkor among	P.5	- Systems used to rear poultry - Diseases that affect poultry

21.	Some animals are used for transport/eaten as food/oxen are used to plough land.	P.7	<ul style="list-style-type: none"> - Meaning of energy resources - Biogas production
22.	Both malaria and elephantiasis are spread by mosquitoes.	P.5	<ul style="list-style-type: none"> - Life cycles of mosquitoes - Diseases they spread
23.	To prevent electric shocks since plastic or rubber is an insulator.	P.7	<ul style="list-style-type: none"> - Forms of electricity - Generator, motor, dynamo
24.	Transpiration	P.4	<ul style="list-style-type: none"> - Meaning of transpiration - Importance of transpiration
25.	Endosperm stores food for the embryo.	P.4	<ul style="list-style-type: none"> - Parts of a maize grain - Those of a bean seed
26.	Bottle feeding enables the baby to get what to feed on when the mother is a full time worker/dead/seriously sick/prevents mother to child HIV transmission incase the mother is HIV positive etc.	P.7	<ul style="list-style-type: none"> - Vulnerable groups - How to care for them
27.	Through breast feeding/feeding on a balanced diet/from the mother to the unborn baby through the placenta/recovering from all illness.	P.5	<ul style="list-style-type: none"> - Meaning of immunity - Immunization table
28.	A magnet helps a cobbler to keep tiny magnetic nails.	P.7	<ul style="list-style-type: none"> - Types of magnets - Properties/methods used to make
29.	Crop rotation/use of scare crows/weeding/pruning	P.4	<ul style="list-style-type: none"> - Meaning of crop rotation - Factors considered
30.	Housing information/common diseases/umber of health centres/human population/information on water sources.	P.7	<ul style="list-style-type: none"> - Meaning of health survey - Demography
31.	Frogs/toads/salamander/newts	P.6	<ul style="list-style-type: none"> - Characteristics of amphibians - Parts of a fish
32.	To easily trap its prey.	P.6	<ul style="list-style-type: none"> - Classification table - Examples of each class
33.	Atomic electricity is produced by burning uranium while hydroelectricity is produced by using fast flowing water to turn the turbines which turn the generator.	P.7	<ul style="list-style-type: none"> - Components of an electric circuit - Flow of electrons and current
34.	Hepatitis B.	P.5	<ul style="list-style-type: none"> - Types of vaccines - Importance of immunity
35.	To increase friction.	P.7	<ul style="list-style-type: none"> - Type of friction - How to increase friction
36.	Vent pipe lets out bad smell.	P.6	<ul style="list-style-type: none"> - Types of latrines - Parts of a toilet
37.	Epiglottis prevents food from entering the wind pipe during swallowing.	P.6	<ul style="list-style-type: none"> - Parts of the structure of respiratory system - Air percentages in breathing
38.	By joining and tying the scion a fruit crop to the stock of another fruit crop (plant) but of the same species.	P.6	<ul style="list-style-type: none"> - Methods of propagating crops - Advantages of vegetative propagation
39.	Arteries transport blood with pressure than the one transported by veins.	P.6	<ul style="list-style-type: none"> - Blood vessels - The human heart

15. In which way is hardening off an important activity in caring for seedlings in a nursery bed?

The diagram below shows the information from a health worker. Use it to answer questions 16 and 17.



16. What name is given to the information from the health worker shown aside?

17. How is the above information useful to sick people?

18. In which way can the keeping of poultry help to prevent kwashiorkor among children in a family?

19. Mention any one habit that causes tooth decay in humans.

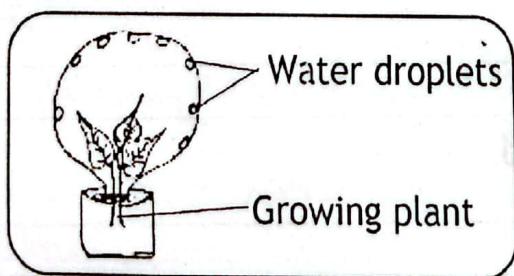
20. What reason would you give to a P.5 child for the difference in behaviour of objects when they are put in water?

21. State any one way animals can be used as a source of energy in the environment.

22. How is malaria similar to elephantiasis in the way they spread?

23. Why are handles of electrical appliances made of plastic or rubber?

The diagram below show an experiment which was conducted by a P.4 class. Use it to answer question 24.



24. What was the experiment about?

25. State the function of the endosperm to a maize grain.

26. Give one advantage of bottle feeding to a baby.

27. Write down any one way humans acquire natural immunity.

28. How is a magnet useful to a cobbler?

29. Give any one method farmers use to control pests without using chemicals.

30. Give any one type of information collected during health surveys.

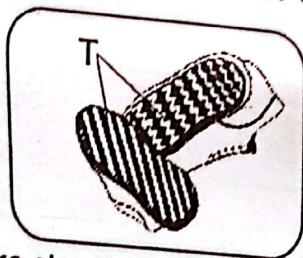
31. Mention any one example of amphibians.

32. Apart from protecting itself, give one other reason why a chameleon changes its colour.

33. State one difference in production between atomic and hydroelectricity.

34. Name the Sexually Transmitted Disease which can be prevented by immunisation.

Use the diagram below of a shoe sole to answer question 35.



35. Why are structures marked T put on shoe soles?

36. State the importance of a vent pipe on a VIP latrine.

37. State the role of the epiglottis in swallowing of food.

38. Explain briefly how grafting is done in propagation of fruit crops.

39. Why are arteries thicker walled than veins?

40. Which part of fish covers the gills?

SECTION .B. (60 Marks)

41. (a) What name is given to the force which is applied on a machine to do work?

(b) Name the group of simple machines which have a slanting surface.

(c) Give two examples of tools in the group of simple machines you have named above.

(i) _____

(ii) _____

42. (a) Mention any one primary change that occurs in girls during adolescence.

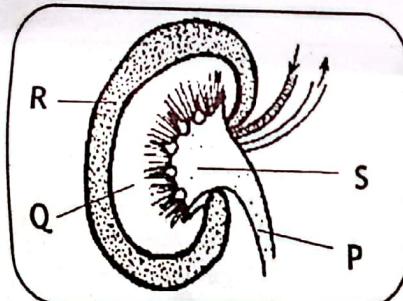
(b) Mention any two secondary changes in both adolescent boys and girls.

(i) _____

(ii) _____

(c) Give any one way adolescents can manage body changes.

The diagram below shows a cross-section through the human kidney. Use it to answer question 43.



43. (a) Name the parts labelled with letters;

(i) R _____

(ii) P _____

(b) Which important process takes place in part marked Q?

(c) What name is given to the substance stored in part marked S?

44. (a) State the role of each of the following in digestion of food;

(i) teeth _____

(ii) enzymes _____

(b) By what process does food move along the alimentary canal?

(c) In which part of the alimentary does absorption of digested food take place?

45. (a) State the method of making alcohol which requires use of a certain fungus.

(b) Name the fungus used in making of alcohol.

(c) Give any one way alcohol can be useful in a hospital.

(d) State one effect of drinking too much alcohol to a family.

46. (a) What is photosynthesis?

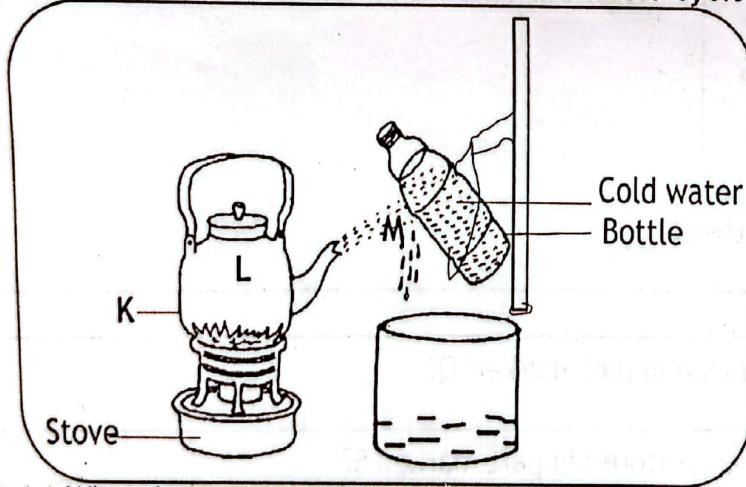
(b) Mention two raw materials used by plants in photosynthesis.

(i)

(ii)

(c) How does photosynthesis benefit animals in the environment?

The illustration below is a model of the water cycle. Use it to answer question 47.



47. (a) What does container K represent in nature?

(b) Name the physical process taking place at points marked with letters;

(i) L

(ii) M

(c) State the role of the stove in the model of the water cycle above.

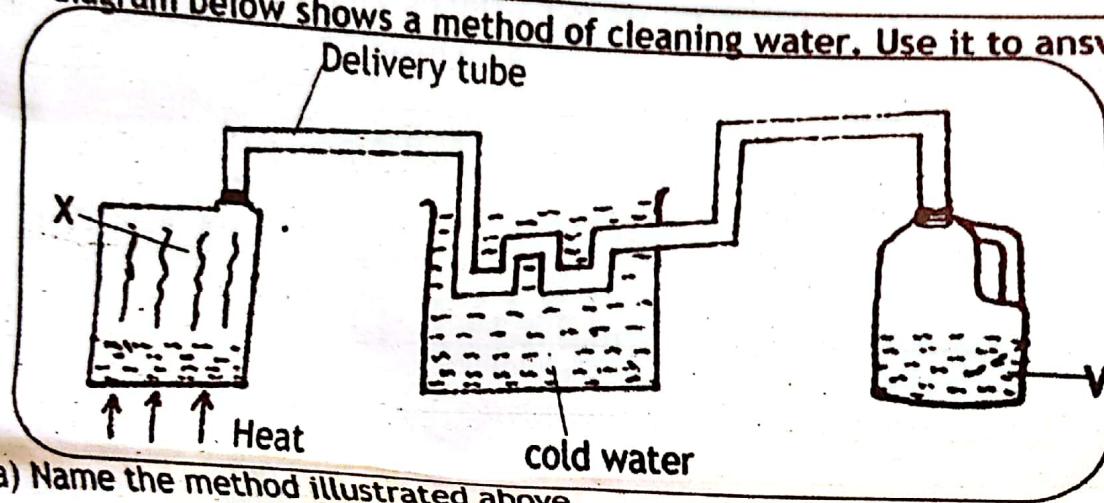
40.	Operculum/Gill cover	P.6	<ul style="list-style-type: none"> - Cold blooded vertebrates - Invertebrate classes
SECTION .B. (60 MARKS)			
41.	(a) Effort (b) inclined planes/slopes (c) Stairs/ramp/winding road/ladder	P.7	<ul style="list-style-type: none"> - Classes of simple machines - Examples of such machines
42.	(a) Development of ovaries and the uterus/menstruation starts. (b) Sweat glands become more active/growth of public hair/hair under the armpits (c) By abstaining from sex/observing good personal hygiene/girls should use sanitary pads during adolescence	P.6	<ul style="list-style-type: none"> - Structure of the female and male reproductive organs - Teenage pregnancy - Causes
43.	(a) (i) R Cortex (ii) P Ureter (b) Selective reabsorption of the needed materials. (c) Urine	P.7	<ul style="list-style-type: none"> - The kidney structure - Excretory organs
44.	(a) (i) Teeth break down food into smaller particles. (ii) Enzymes speed up the rate of digestion. (b) By peristalsis (c) In the ileum	P.5	<ul style="list-style-type: none"> - Structure of the digestive system - Parts and functions
45.	(a) Fermentation (b) Yeast (c) Alcohol is used to sterilize some medical instruments (d) It leads to spouse abuse/poverty/child abuse/loss of home property/violence in a home.	P.6	<ul style="list-style-type: none"> - Types of alcohol - Factors that lead to alcoholism - Smoking - Types of smoking
46.	(a) Photosynthesis is the process by which plants make their own food called starch with help of sunlight energy. (b) water/carbon dioxide (c) Photosynthesis provides oxygen to animals/food to animals.	P.4	<ul style="list-style-type: none"> - Use of raw materials in photosynthesis - Use of the conditions in the photosynthesis
47.	(a) water body (b) L- evaporation M- condensation (c) Stove is a source of heat for turning water in steam.	P.4	<ul style="list-style-type: none"> - Elements of weather - Weather instruments
48.	(a) Both a fuse and a switch break the circuit. (b) To prevent children from electric shocks. (c) The fuse melts and then breaks the circuit in case of high voltage.	P.7	<ul style="list-style-type: none"> - Parts of a dry cell - Functions of parts - Energy changes in the electric bulb

	(d) To increase electrical resistance in order to produce more heat and light energy.	P.5	-
49.	(a) Distillation method. (b) To condense the steam. (c) Distillate (d) It lacks minerals salts.	P.6	- Meaning of hard water and soft water - How to make hard water soft
50.	(a) Complete lifecycle. (b) Larva stage (c) A housefly has a hairy body that enables it to carry germs. (d) By spraying chemicals/proper disposal of faeces/covering the pit holes of ordinary latrines.	P.4	- Meaning of disease vectors - All diseases vectors with their diseases
51.	(i) Convulsion are uncontrollable body shakings (ii) Fainting is the brief loss of consciousness. (b) Prolonged hunger/standing in sunshine for a long time/body exhaustion. (c) Removing tight clothes from the body of a convulsing person/controlling the bystanders.	P.6	- Major cause of fainting - First aid for fainting - Other accidents - Dangers of burns
	(a) (i) Plants produce food (ii) Help in decomposition of organic matter (b) The number of primary consumers increases. (c) Sweet potato → rat → cat	P.7	- Meaning of food chain - Ecology - Ecosystem - Biodiversity
53.	maize/wheat/sorghum/etc (b) To prevent them from rotting. (c) Cereals provide carbohydrates to humans.	P.4	- Types of germination - Conditions - Their importance
54.	(a) Light travels faster than sound. (b) Lighting can set houses/things on fire/can kill animals. (c) By installing lightning conductors on tall buildings.	P.7	- How lighting is formed - Importance of lighting to a crop farmer
55.	(a) Coccidiosis (b) Newcastle disease/Gumboro/black head/fowl typhoid etc (c) By culling sick birds/isolating sick birds/cleaning the feeding troughs and waterers regularly/vaccinating poultry regularly	P.5	- Poultry diseases with their signs and symptoms - Examples of broilers/layers/broilers - Their feeds

END

48. (a) Give one similarity between a fuse and a switch.
-
- (b) Why is it advisable to fix switches and sockets where young children cannot easily reach?
-
- (c) How does a fuse perform its function?
-
- (d) Why is the filament of an electric bulb coiled?
-

The diagram below shows a method of cleaning water. Use it to answer question 49.



9. (a) Name the method illustrated above.
-
- (b) Why is the delivery tube passed through cold water?
-
- (c) What scientific name is given to substance marked P?
-
- (d) State the reason why it is not good to drink the water prepared by the above method.
-
50. (a) What type of lifecycle does a housefly undergo?
-
- (b) Which stage in the lifecycle of a housefly helps to break down the faeces in latrines?
-
- (c) How is an adult housefly able to carry germs from dirty places to uncovered food?
-
- (d) Give any one way of controlling houseflies in a home.
-

51. (a) Define each of the following;
 (i) Convulsions
-

(ii) Fainting

(b) State any one cause of convulsions.

(c) State one first aid that can be given to a convulsing person.

52. (a) How are the following important in food chains;

(i) plants?

(ii) fungi and bacteria?

(b) What happens to the number of primary consumers when the number of secondary consumers decrease?

(c) Rearrange and use arrows to show the flow of energy in a food chain involving the following organisms; bacteria, sweet potato, cat, rat.

53. (a) Mention any two examples of cereals.

(i)

(ii)

(b) Give a reason why farmers dry their cereals after harvesting.

(c) How are cereals useful in human nutrition?

54. (a) Why do we see a flash of lightning before we hear the sound of thunder when it is raining?

(b) Mention any two dangers of lightning in the environment.

(i)

(ii)

(c) What should be done in a school to protect its members from the dangers of lightning?

55. (a) Mention one poultry disease which affects rabbits.

(b) Apart from the above disease, mention any one other poultry disease.

(c) State two ways of controlling/preventing diseases on a poultry farm.

(i)

(ii)

END