



BROAD EXAMINATIONS®

P.7 INTEGRATED SCIENCE EXAMINATION PRE – PLE TRIAL SET V 2024

Time allowed: 2 hours 15 minutes.

Pupil's Name:

EMIS Number:

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.
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 EXAMINER'S 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

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Approved by:

Agnes
Team Head Science Dept.

SECTION .A. (40 MARKS)

1. Name any one simple machine that belongs to second class levers.

2. Write down any one good effect of chemical changes in the environment.

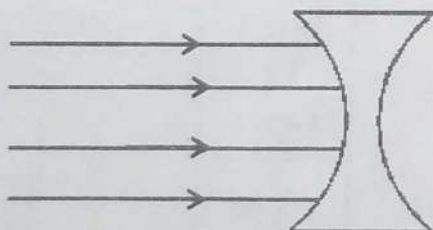
3. Which group of flowering plants produce seeds with two cotyledons?

4. State the function of joints in the human body.

5. How do farmers break seed dormancy before sowing seeds?

6. Why should drugs be kept in properly sealed containers?

The diagram below shows a type of lens. Use it to answer question 7.



7. Complete the diagram to show the effect of the above lens on a parallel beam of light.

8. In which way do tsetse flies spread nagana to cattle?

9. Which physical process involved in the water cycle is caused by heat gain?

10. How are small hairs found in the respiratory tract important?

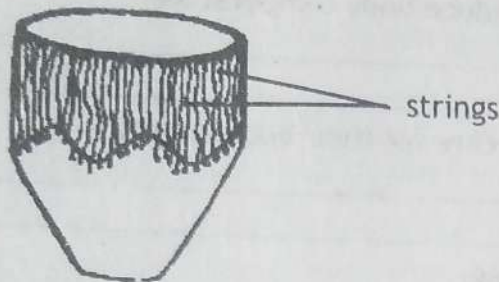
11. Name the group of arthropods that has at least a pair of legs on each segment.

12. How does regular bathing help to promote personal hygiene?

13. Write down any one advantage of bottle feeding to a family.

14. Give any one way of controlling insect pests in tuber crop gardens.

The diagram below shows a musical instrument. Use it to answer questions 15 and 16.



15. To which group of musical instruments does the above instrument belong?

16. Of what use are the strings found on the above musical instrument?

17. How are sea mammals like whales adapted to living in cold waters of seas?

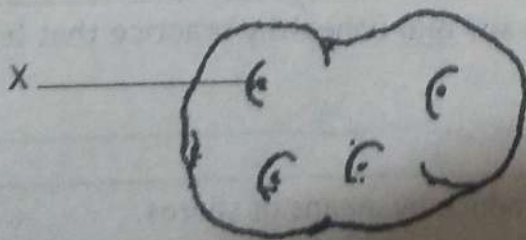
18. Which property of magnets helps in resetting a six's thermometer?

19. How is grooming of fingernails important to human health?

20. How does a tortoise protect itself from enemies?

21. Give any one way in which plants depend on other plants in the environment.

The diagram below shows an Irish potato tuber. Use it to answer question 22.



22. What is the function of part marked X to an Irish potato?

23. Give any one importance of seed dispersal in the environment.

24. Name the energy resource which is essential in winnowing.

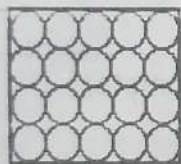
25. In which one way does the human skin reduce body temperature?

26. Suggest any one way schoolchildren can care for their body organs.

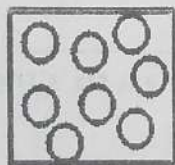
27. Write down any one use of echo to people.

28. Mention any one way of reducing friction in moving parts of machines.

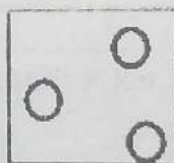
The diagrams below show the states of matter. Use them to answer question 29.



X



P



Q

29. How is heat transfer in state of matter P different from that in state of matter X?

30. Mention any one disease which attacks white blood cells.

31. Give any one factor that leads to alcoholism in young people in a community.

32. Write down any one activity of a health club in a school.

33. Apart from leaving food uncovered, mention any one unhealthy practice that leads to food contamination.

34. Name any one example of plants which reproduce by means of spores.

35. State any one advantage of castration in cattle management.

36. Why do humans tend to urinate more frequently during cold weather?

37. State the role of bile salts in the digestion of food.

38. Give one danger of using small sharp sticks for cleaning ears.

39. In which one way can animals be used as resources in the environment?

40. How do infants acquire immunity against childhood killer diseases?

SECTION .B. (60 MARKS)

41. (a) Name the disease which is spread by rabid dogs to humans.

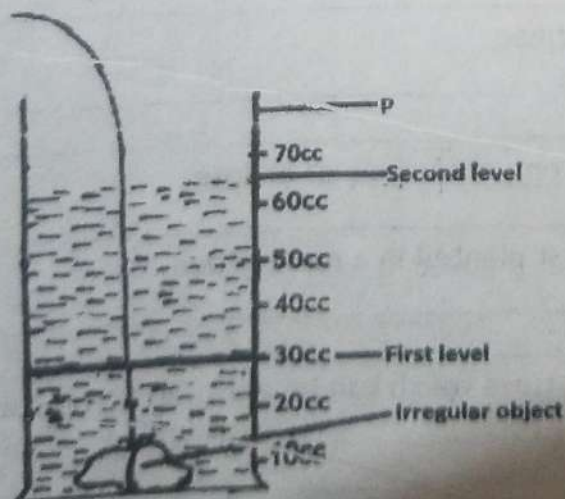
(b) Mention any two examples of vectors which spread diarrhoeal diseases.

(i) _____

(ii) _____

(c) State one way family members can help in controlling disease vectors at home.

The diagram below shows a method of finding volume of an irregular object. Use it to answer question 42.



42. (a) Name the method used to find volume of an irregular object shown above.

(b) Name the instrument marked P used in finding the volume of an irregular object.

6. Find the density of the irregular object above if its mass is 105g. (02 marks)

43. (a) How is oxygen important in the process of respiration?

(b) Where does respiration take place in the human body?

(c) Which part of air is increased in the atmosphere during respiration?

(d) How is respiration an important process in living things?

44. (a) Mention any two examples of animal fibres.

(i)

(ii)

(b) Give any two animals that provide us with fibres.

(i)

(ii)

45. (a) State role of opaque objects in the formation of shadows.

(b) Which type of shadows is caused by total obstruction of light?

(c) Describe how solar eclipse is formed.

(d) Apart from solar eclipse, name one other type of eclipse.

46. (a) State a reason why trees are first planted in a nursery bed.

(b) Give any two characteristics of trees which can be grown in agroforestry.

(i)

(ii)

(c) Mention the method of harvesting trees for timber.

47. (a) What is the recommended first aid for fever?

- (b) Write down any two causes of fever in humans.
- (i) _____
- (ii) _____

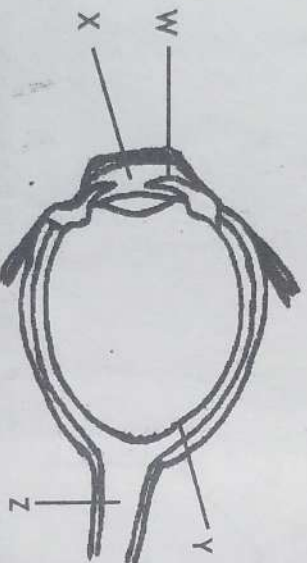
- (c) State one body condition that results from high fever.
- _____

48. (a) Why is it dangerous to put on dirty clothes?
- _____

- (b) Mention the first two steps taken in cleaning clothes.
- (i) _____
- (ii) _____

- (c) State any other one way of caring for our clothes apart from cleaning them.
- _____

The diagram below is of a human eye. Use it to answer question 50.



50. (a) Name parts marked with letters X and Y.

- (i) X _____
- (ii) Y _____
- (b) State the function of part marked Z to the human eye.
- _____

- (c) Which part of a lens camera can be compared to part marked W of the human eye?
- _____

51. (a) Of what importance are perches in a chicken house?
- _____

- (b) Name two other items found in a chicken house.

- (i) _____
- (ii) _____
- (c) Mention any one system that involves keeping chickens in houses all the time.
- _____

- (c) Mention any one system that involves keeping chickens in houses all the time.
- _____

52. (a) Mention any two importance of sunshine to people.
- (i) _____
- (ii) _____

(b) Suggest any one way of managing hot sunny weather.

(c) Name the weather instrument which measures the time the sun shines in a day.

53. (a) Why is bullying and teasing not good in schools?

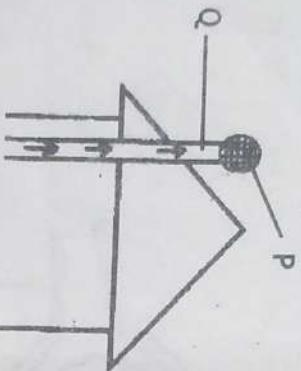
(b) State any one cause of bullying and teasing in schools.

(c) Mention any two other antisocial behaviours in schools apart from bullying and teasing.

(i) _____

(ii) _____

The diagram below shows parts of a VIP latrine. Use it to answer question 54.



54. (a) Name the features marked with letters P and Q in the diagram above.

(i) P _____

(ii) Q _____

(b) What do arrows in the diagram above represent?

(c) How many metres should a VIP latrine be constructed away from the water source?

55. (a) What is adolescence?

(b) Mention any one physical body change in;

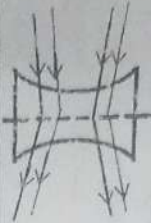
(i) adolescent boys.

(ii) adolescent girls.

(c) Write down any one danger of teenage pregnancies.

END

BROAD EXAMINATIONS GUIDES
P. 7 SCIENCE PRE PLE TRIAL SET V 2024

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CORRECT ANSWER(S)		CLASS	RELATED CONTENT
Wheel barrow/nut cracker/bottle opener/human foot	P. 7	<ul style="list-style-type: none">- How simple machines ease work.- Classes of simple machines.	
Decomposition helps in formation of humus/rusting adds iron in the soil/burning helps in cooking food/etc.	P. 5	<ul style="list-style-type: none">- Other types of changes.- Examples of types of changes.	
Dicotyledonous seeds	P. 4	<ul style="list-style-type: none">- Types of germination.	
Joints help the body in movement/enable the body to bend	P. 7	<ul style="list-style-type: none">- Structure of the human skeleton.- Parts and functions.	
By soaking seeds in water/by heating some seeds.	P. 4	<ul style="list-style-type: none">- Meaning of seed dormancy.- Meaning of seed viability.	
To prevent drug contamination	P. 6	<ul style="list-style-type: none">- Meaning of drugs.- Types of drugs.	
To prevent drug contamination	P. 7	<ul style="list-style-type: none">- Optical instruments.- Their uses.	
			
Through bites	P. 6	<ul style="list-style-type: none">- Types of cattle.- Their shapes.	
Evaporation	P. 4	<ul style="list-style-type: none">- Components of water cycle.	
They filter air entering the nose.	P. 6	<ul style="list-style-type: none">- Respiratory organs.	
Myriapods	P. 7	<ul style="list-style-type: none">- Classification table of animals.	
Regular bathing removes dirt from the body/by killing germs on the body/removes sweat from the body	P. 4	<ul style="list-style-type: none">- Tools used to promote personal hygiene.- Indicators of poor personal hygiene.	
Bottle feeding is cheap to manage/it's time saving/	P. 5	<ul style="list-style-type: none">- Meaning of weaning babies.- Importance of weaning.	
By spraying using insecticides/regular weeding/	P. 4	<ul style="list-style-type: none">- Meaning of pests.- Pest damages.	
Percussion musical instruments	P. 6	<ul style="list-style-type: none">- Other classes of musical instrument.	
They are used to tighten or loosen the skin.	P. 6	<ul style="list-style-type: none">- Meaning of pitch, frequency and volume.	
They have blubber to remain warm in cold waters	P. 6	<ul style="list-style-type: none">- Groups of mammals.- Examples of mammals.	
Magnetism can pass through non-magnetic materials	P. 7	<ul style="list-style-type: none">- Uses of magnets.- Properties of magnets.	
It removes the hiding places for germs	P. 4	<ul style="list-style-type: none">- Meaning of personal hygiene.	

20.	By hiding itself in the hard shell	P.6	<ul style="list-style-type: none"> - Examples of molluscs. - Other invertebrates.
21.	Some plants get support from other plants/obtain food from other plants/get shade from other plants	P.7	<ul style="list-style-type: none"> - Food chain. - Formation of food chain.
22.	Part X develops into shoot system	P.5	<ul style="list-style-type: none"> - Examples of stem / root tubers.
23.	It prevents overcrowding of plants/prevents extinction of some plant species/increases chances of survival of some plant species.	P.6	<ul style="list-style-type: none"> - Meaning of seed dispersal. - Disadvantages of seed dispersal.
24.	Wind	P.7	<ul style="list-style-type: none"> - Meaning of energy resources.
25.	By sweating/by vasodilation/by bending hair to allow heat loss from the body.	P.7	<ul style="list-style-type: none"> - Structure of the human skin. - Diseases of the skin.
26.	By bathing daily/feeding on a balanced diet/wearing washed under wears	P.4	<ul style="list-style-type: none"> - Location of body organs in the human body. - Their diseases.
27.	Echo helps sailors to find the depth of the sea/used by doctors to view the structure of the heart/used by the blind to walk using white cane.	P.6	<ul style="list-style-type: none"> - How to reduce echo in cinema halls. - Meaning of echo.
28.	By greasing/oiling turning parts of machines/using rollers/using ball bearings	P.7	<ul style="list-style-type: none"> - Meaning of friction. - How to increase friction.
29.	Heat travels by convection in state P while heat travels by conduction in state X.	P.5	<ul style="list-style-type: none"> - Application of heat transfers. - Natural sources of heat energy.
30.	HIV/AIDS	P.3	<ul style="list-style-type: none"> - Effects of HIV/AIDS to an individual.
31.	Frustration, idleness/peer pressure/loneliness/poor social environment	P.6	<ul style="list-style-type: none"> - Reasons why people abuse drugs. - Effects of drugs to an individual.
32.	Conducting health parades/carrying out health surveys/carrying out health inspections/etc.	P.5	<ul style="list-style-type: none"> - Elements of PHC. - Principles of PHC.
33.	Handling food with dirty hands/keeping food in dirty environment/keeping food in dirty containers/	P.4	<ul style="list-style-type: none"> - Reasons why people eat. - Meaning of food poisoning.
34.	Horse tail/hornwort/liverwort/fenn	P.6	<ul style="list-style-type: none"> - Classification of plants.
35.	Castration makes animals docile/prevents inbreeding among cattle/prevents the easy spread of venereal diseases among cattle/castration fattens animals	P.6	<ul style="list-style-type: none"> - Cattle management practices. - Their importance.
36.	During cold days, there is no sweating so the only way the body loses excess water and excess salts is through urination.	P.7	<ul style="list-style-type: none"> - Functions of the skin. - Diseases and disorders of the human skin.
37.	Bile salts emulsify fats.	P.5	<ul style="list-style-type: none"> - Structure of the human digestive system.
38.	It leads to damage to the ear drum	P.6	<ul style="list-style-type: none"> - Structure of the human ear.
39.	Oxen are used to plough land/donkeys are used for transport/some animals are eaten as food/etc.	P.6	<ul style="list-style-type: none"> - Types of resources. - Conservation of resources.

Q0	Through immunization	P.5	- Immunization table.
SECTION.B			
Q1	(a) Rabies (b) Housefly/cockroach (c) By proper disposal of rubbish/proper disposal of human wastes/constructing latrines/etc.	P.4	- How vectors spread diseases causing germs. - How to control disease vectors.
Q2	(a) Displacement method (b) Measuring cylinder (c) Volume = 2 nd level - 1 st level = 6 Scc - 30cc = 35cc $D = \frac{M}{V}$ $= \frac{105g}{35cc}$ = 3g/cc	P.5	- Difference between mass and weight. - Instruments used in displacement method.
Q3	(a) Oxygen oxidises glucose to produce energy (b) In the living body cells (c) Carbon dioxide (d) It helps living things to get energy	P.6	- Structure of human respiratory system. - Disorders of the human respiratory system.
Q4	(a) Mohair/silk/wool/fur (b) silkworm/angora goat/cashmere goat (c) Opaque objects obstruct light (b) Umbra shadow (c) Solar eclipse is formed when the moon is between the earth and the sun and all the three are in a straight line. (a) Lunar eclipse (eclipse of the moon)	P.6	- Ways of conserving animals.
Q5	(a) Opaque objects obstruct light (b) Umbra shadow (c) Solar eclipse is formed when the moon is between the earth and the sun and all the three are in a straight line. (a) Lunar eclipse (eclipse of the moon)	P.7	- Other types of eclipse. - Objects that affect light energy.
Q6	(a) To protect seedlings from harsh weather conditions since they have tender shoots. (b) They should be able to mature faster than crops/they have a light canopy/they should be deep rooted to use nutrients from deep layers/etc (c) Coppicing method	P.7	- Meaning of nursery bed. - Importance of a nursery bed.
Q7	(a) Tepid sponging method. (b) Infections/tissue injury/inflammatory disorders (c) Convulsions/fits	P.6	- Meaning of fever. - Meaning of convulsions.
Q8	(a) It leads to easy spread of skin diseases (b) Sorting/soaking (c) Keeping them in clean places/repairing them when they are torn/keeping them on hangers to maintain their shape.	P.6	- Steps taken in cleaning clothes. - Their importance.

20	(a)		
21	(a) (i) Pupil (ii) Retina (b) Part Z takes nerve impulses about vision to the brain for interpretation (c) Diaphragm	P.7	<ul style="list-style-type: none"> - Characteristics of images formed by the human eye. - Diseases that affect eyes.
22	(a) Perches enable birds to rest/to perform physical exercises (b) Feeding trough/drinking waterer/ (water trough) (c) Deep litter system/cage system (battery system)	P.5	<ul style="list-style-type: none"> - Types of poultry. - Examples of broilers and layers.
23	(a) Sunshine helps people to dry wet clothes/to dry harvested crops/to preserve some foods/ (b) By keeping indoors/using an umbrella/wearing hats/ (c) Sunshine recorder	P.4	<ul style="list-style-type: none"> - Components of model of rain formation (water cycle) - Weather instruments.
24	(a) They lead to school refusal (truancy) among schoolchildren / they may result into injuries (b) Failure by school administrators to enforce school rules and regulations/lack of school rules and regulations (c) Alcoholism/smoking/sexual deviations/ stealing /defilement/raping/ (d) (i) fly screen (ii) vent pipe (b) Bad smell (c) At least 30 metres	P.7	<ul style="list-style-type: none"> - Meaning of antisocial behaviours - Causes of antisocial behaviours.
25	(a) Adolescence is the transitional stage between childhood and adulthood. (b) The body becomes more muscular/growth of beards (ii) Rounding and widening of hips/growth of breasts (c) Obstructed labour/death may occur during delivery/lack of financial support/school dropouts/abortion/etc.	P.6	<ul style="list-style-type: none"> - Other types of pit latrines. - How to maintain a pit latrine.
26			<ul style="list-style-type: none"> - Meaning of teenage pregnancy. - Causes of teenage pregnancy. - Requirements of a pregnant mother.

END