



# BROAD EXAMINATIONS®

## P.6 INTEGRATED SCIENCE EXAMINATION

### TRIAL SET I TERM II - 2023

Time allowed: 2 hours 15 minutes

Pupil's Name: .....

School Name: .....

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		
<b>TOTAL</b>		

Teacher's comment to the learner

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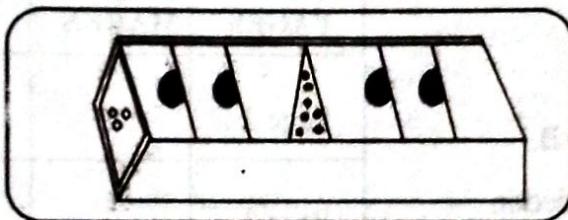
Approved by:

Team Head Int. Science Dept.

**SECTION.A. (40 Marks)**

1. Which part of a cabbage plant stores food?
2. Give a reason why a parked car possesses potential energy.
3. Name the component of soil preserved by mulching.
4. In which way are plants useful in the rain cycle?
5. State the reason why we should brush our teeth regularly.
6. In which group of invertebrates is a slug grouped?

Use the diagram below of a hive and answer question 7.



7. Name the bee hive shown above.
8. State one function of valves in the human heart.
9. Give one reason why a tick is classified as an arachnid.
10. Name the physical change that takes place when matter in solid state directly changes to gas state.
11. How are plant leaves adapted to carrying out photosynthesis?  

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12. Name the system of keeping pigs where they are kept indoors.  

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13. Suggest a reason why water sources in the community should be fenced.  

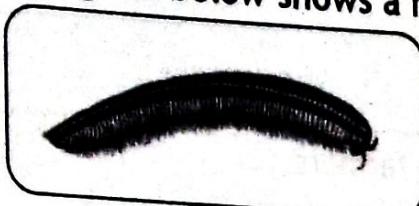
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14. In which way are reptiles similar to birds in their way of reproduction?

15. State any one advantage of carrying out crop rotation in the garden.

The diagram below shows a myriapod. Use it to answer question 16.



16. Name the myriapod shown above.

17. Write down the role played by the village health committee in the community.

18. Give any one advantage of putting out fire when not in use.

19. How does HIV/AIDS affect the body's immunity?

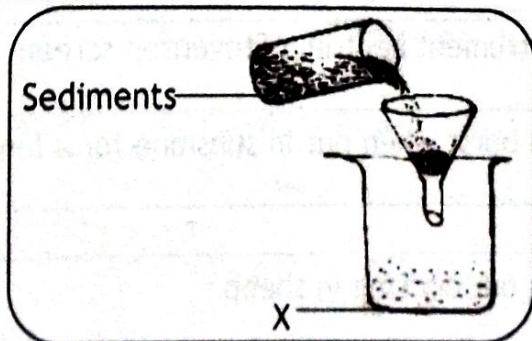
20. Write down any one physical property of sand soil.

21. In which one way is the property of air "air exerts pressure" useful in our daily life?

22. Mention any one example of stem tubers.

23. State a reason why farmers prefer local breeds of rabbits to exotic ones.

The diagram below shows a method of removing impurities from water, use it to answer 24 and 25.



24. Name the method shown above.

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25. How is water obtained at X not good for drinking?

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26. State any one way bacteria are useful in the environment.

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27. Give any one example of ruminant animals.

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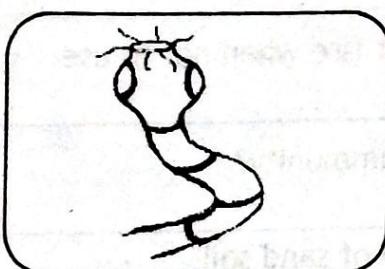
28. Write down any one danger of wild birds to crop farmers.

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29. Give a reason why measles vaccine is given to babies at nine months and not before.

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The diagram below shows an intestinal worm, use it to answer question 30.



30. Name the intestinal worm shown above.

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31. Write down any one similarity between ferns and fungi.

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32. In which one way do frogs protect their eggs against predators?

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33. State a reason why passion fruits develop tendrils as they grow.

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34. Name the deficiency disease which causes poor night vision in humans.

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35. Identify any one weather instrument kept in a Stevenson screen.

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36. Why does an inflated balloon burst when put in sunshine for a long time?

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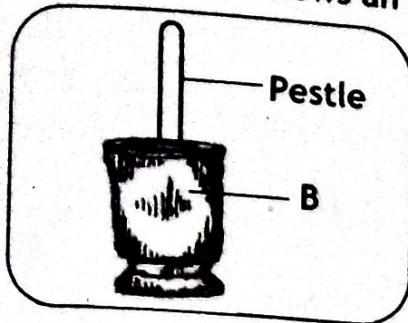
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37. State one reason for carrying out docking in sheep.

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The diagram below shows an item used at home. Use it to answer question 38.



38. Name the item labeled B.

39. How are sunbirds useful to crop farmers?

40. Mention the state of matter where molecules are compact and don't move freely.

#### SECTION .B. (60 Marks)

41. (a) State the incubation period of a hen.

(b) Write down the type of incubation commonly used by commercial farmers.

(c) Why should poultry farmers put the laying nests in dark corners of the coop?

(d) Mention any one exotic breed of chicken kept for egg production.

42. (a) Mention any one communicable intestinal disease that attacks humans.

(b) In which two ways can we control the disease you have mentioned in (a) above?

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

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

(c) State the immediate effect of communicable intestinal diseases to humans.

43. (a) Write down any one advantage of living in a nuclear family.

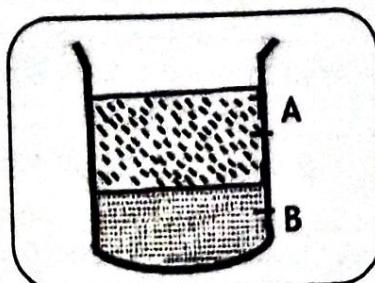
(b) State any two ways a family can promote Primary Health Care (PHC).

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

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

(c) Which element of PHC is promoted by the family that regularly feeds on a balanced diet?

The diagram below shows a mixture of water and oil which were mixed by a P.6 pupil. Use it to answer question 44.



44. (a) Name the liquid marked;

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

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

(b) State a reason why liquid B settled below liquid A.

\_\_\_\_\_

(c) Name the method used to separate the above liquids.

45. (a) What type of fracture occurs when the bone breaks and remains inside the human body?

(b) How are the following items useful in giving first aid for a fracture;

(i) splints? \_\_\_\_\_

(ii) safety pin? \_\_\_\_\_

(c) Suggest the recommended first aid for snake bites.

46. (a) Give any two methods of preserving food that do not involve the use of heat.

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

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

(b) Mention any two ways food gets contaminated.

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

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

47. (a) How is the tongue useful during digestion?

\_\_\_\_\_

(b) State any one enzyme secreted in the;

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

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

(c) How is a pancreas useful in digestion of food in the duodenum?

48. (a) What is soil erosion?

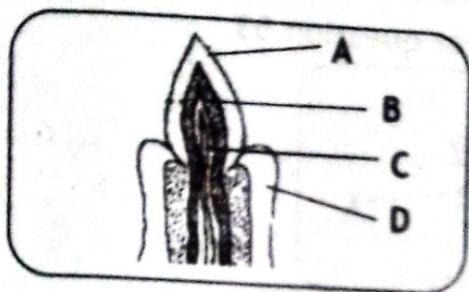
(b) Write down any one agent of soil erosion.

(c) Give any two methods farmers use to control soil erosion in your community.

(i)

(ii)

The diagram below shows a structure of a canine tooth. Use it to answer question 49.



49. (a) Name the part marked;

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

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

(b) How is part C useful in a tooth?

(c) Write down the tooth disease that destroys part marked A.

50. (a) In which units is temperature measured?

(b) Write down any two temperature scales used in thermometers.

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

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

(c) Which form of energy causes an increase in temperature?

51. (a) Write down any two natural changes in the environment.

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

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

(b) How can farmers protect their crops against the effects of natural changes?

(c) Suggest any one way afforestation helps to conserve the environment.

52. Match the following vectors with the germs they carry.

A

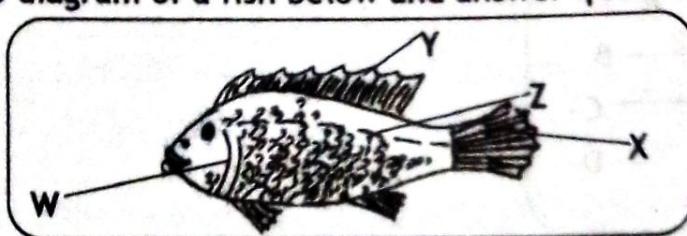
- Mosquito  
Tsetse fly  
Housefly  
Tick

B

- rickettsia
- plasmodia
- trypanosomes
- vibriocholerae

- (a) Mosquito \_\_\_\_\_  
(b) Tsetse fly \_\_\_\_\_  
(c) Housefly \_\_\_\_\_  
(d) Tick \_\_\_\_\_

Use the diagram of a fish below and answer question 53.



53. (a) Name the parts marked;

- (i) Y \_\_\_\_\_  
(ii) W \_\_\_\_\_

(b) State the function of part marked;

- (i) X \_\_\_\_\_  
(ii) Z \_\_\_\_\_

54. (a) Give the type of germination that occurs in most monocotyledonous seeds.

(b) State the role played by warmth in germination of seeds.

(c) Give one way farmers can improve seed viability before planting.

(d) Which type of leaf venation do monocotyledonous plants have?

55. (a) Why are the elderly referred to as vulnerable people?

(b) Apart from the elderly, write down any other group of vulnerable people.

(c) Write down any two religious food taboos in your community.

- (i) \_\_\_\_\_  
(ii) \_\_\_\_\_

END

**BROAD EXAMINATIONS GUIDES**  
**P.6 SCIENCE TRIAL SET I TERM 2 2023**

QN	CORRECT ANSWER(S)	CLASS	RELATED CONTENT
1.	Leaves	P.3	- How to care for vegetable crops - Garden tools
2.	It is at rest	P.5	- Difference between potential and kinetic energy
3.	Water	P.5	- Types of soil - Components of soil
4.	Plants add water vapour to the atmosphere through transpiration.	P.4	- Model of water cycle Components of water cycle
5.	To remove food remains	P.4	- Type of teeth Their diseases
6.	Molluscs	P.6	- Characteristics of molluscs - Other classes of invertebrates
7.	Top bar hive	P.5	- Advantages of using modern hive - Disadvantages
8.	Valves prevent the back flow of blood.	P.6	- Structure of the heart Functions of parts
9.	It has eight legs/ two main body parts/ simple eyes	P.6	- Other examples of arachnids Other classes of arthropods
10.	Sublimation	P.5	- Meaning of heat energy Natural and artificial source of heat energy
11.	They have chlorophyll for trapping sunlight.	P.4	- Meaning of photosynthesis Raw materials
12.	Intensive system	P.5	- Exotic breeds of pigs Diseases that affect goats and pigs
13.	To prevent water contamination.	P.3	- How water sources get contaminated Water borne diseases
14.	Both reproduce by laying eggs/ undergo internal fertilization.	P.6	- Classification table of birds
15.	It controls weeds/ crop pests/ increases crop yields/ improve soil fertility.	P.5	- Definition of crop rotation Factors considered before starting crop rotation
16.	Millipede	P.6	- Structural difference between a millipede and a centipede
17.	Organizing health seminars/ carrying out health surveys/ organizing health competitions.	P.5	- PHC activities Their importance
18.	It helps to conserve fuel	P.3	Natural sources of energy Uses and dangers of energy
19.	It weakens the immunity	P.3	- How HIV is spread How to prevent it
20.	It has large air spaces/ good drainage	P.5	Uses of sand soil Uses of soil to plants
21.	It helps people to drink soda using a straw/ siphoning liquids.	P.3	- Components of air Their uses

22.	White yam/ Irish potatoes	P.5	- Diseases that affect stem tuber - How they are propagated
23.	Local breeds are more resistant to diseases than exotic ones/ need less care than exotic ones.	P.4	- Rabbit diseases - How to prevent them
24.	Filtration method	P.5	- Separation of mixtures - Solvent, solute and solution
25.	It still contains germs.	P.5	- Meaning of hard water
26.	Some are used for fermentation of milk/ used to make vaccines/ used in digestion/ help in decomposition of organic matter.	P.5	- Structure of a bacterium - Dangers of bacteria
27.	Cow/ goat/ sheep	P.6	- Classes of mammals - Examples of each group
28.	Some wild birds eat people's chickens/ destroy crops/ make noise/ cause accidents at the airstrip.	P.3	- Examples of wild birds - How to care for birds
29.	Babies are born with maternal immunity that fights measles for nine months only. (up to nine months)	P.5	- Immunization table - Methods used to administer vaccine
30.	Tapeworms	P.4	- Effects of worm infections - How to control worms
31.	Both reproduce by means of spores	P.6	- Classification table of plants - Seed dispersal
32.	By laying eggs with smelly jelly	P.6	- Similarities between amphibians and reptiles - Their examples
33.	To be used for climbing other plants in order to get extra support.	P.4	- How are other plants climb other plants - Parts of a flowering plant.
34.	Night blindness	P.4	- Deficiency diseases - How to prevent them
35.	Barometer/ six's thermometer/ hygrometer	P.4	- Uses of weather instruments - Units used to measure rainfall
36.	It is due to expansion of air inside the balloon	P.5	- Effects of heat on matter - Dangers of heat energy
37.	It eases mating	P.5	- Breeds of goats - Diseases in goats
38.	Mortar	P.2	- Materials used to make local materials - Uses of materials made
39.	They pollinate flowers of crops	P.6	- Classes of birds - Adaptations of birds to flight
40.	Solid state	P.5	- Cohesion force - Adhesion force
- SECTION.B.(60 MARKS)			
41.	(a) 21 days (b) Artificial incubation (c) To prevent egg eating.	P.5	- Meaning of poultry vice - Examples of poultry vices

	(d) Ancona/ brown egger/minorca		
42.	(a) Typhoid/ dysentery/ cholera/ diarrhoea (b) By boiling drinking water/ covering left overs/- washing hands before eating (c) Dehydration	P.4	- Meaning of communicable diseases - Groups of germs -
43.	(a) There are enough basic needs. (b) Taking its children for immunization/ getting involved in cleaning water sources/ preparing a balanced diet (c) Food and nutrition	P.	- Principles of PHC - Elements of PHC
44.	(a) (i) oil (ii) water (b) Liquid B is more dense than liquid A (c) Use of a separating funnel	P.5	- Methods used to separate mixtures - Matter and its states
45.	(a) Simple fracture (b) (i) they hold the broken bone in one position. (ii) it is used to fasten the bandage. (c) Tying a tourniquet slightly above the bitten part/ apply a black stone on the bitten part.	P.4	- Meaning of accidents - Causes of accidents - Their effects
46.	(a) Refrigeration/ salting/ tinning or canning (b) Through leaving it uncovered/ handling it with dirty hands/ by house flies	P.4	- Classes of food - Functions of food in the body
47.	(a) The tongue rolls food into bolus for easy swallowing. (b) (i) salivary amylase(ptyalin) (ii) Pepsin/ Rennin (c) It produces pancreatic juice.	P.5	- Meaning of digestion - Types of digestion - Disorders
48.	(a) Soil erosion is the gradual removal of top soil from one place to another by erosion agents. (b) Moving animals/ flowing water/ strong wind (c) Mulching/ crop rotation/ afforestation/ planting cover crops.	P.5	- Effects of soil erosion - Causes of soil erosion
49.	(a) (i) dentine (ii) gum (b) It supplies the tooth with food nutrients and oxygen. (c) Tooth decay	P.4	- Tools used to clean teeth

		P.4	Disorders of teeth
50.	(a) Degrees (b) Centigrade (Celsius scale)/ kelvin scale/ Fahrenheit scale (c) Heat energy	P.5	- Effects of heat gain on matter - Effects of heat loss
51.	(a) Floods/ drought/ earthquake/ storm (b) Early planting/ timely planting/ planting drought resistant crops/ harvesting in the right time. (c) Trees controls soil erosion/habitat for animals/modify climate.		
52.	(a) Plasmodia (b) Trypanosomes (c) Vibrio cholerae (d) Rickettsia	P.3	- Disease vectors with diseases they spread. - How to prevent such diseases
53.	(a) (i) dorsal fin (ii) operculum (gill cover) (b) (i) tail fin (ii) lateral line	P.4	- Adaptation of fish to live in water - Types of fish
54.	(a) Hypogeal germination (b) Warmth breaks down seed dormancy/ activates enzymes in the seed to begin germination (c) By seed selection/ soaking seeds (d) Parallel leaf venation	P.6	- Types of germination Diagrams about them
55.	(a) They need special care and can easily be harmed by poor feeding. (b) Pregnant mothers/ the sick/ babies (c) Moslems are not allowed to eat pork/ Catholics are not allowed to eat meat on holy Fridays/ Christians are not allowed to eat meat during lent period.	P.5	- Meaning of staple foods - Factors that affect feeding patterns in different areas.

END