



BROAD EXAMINATIONS®

P.6 INTEGRATED SCIENCE EXAMINATION

MID - TERM I 2024

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.

Teacher's comment to the learner

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**FOR EXAMINERS'
USE ONLY**

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

Approved by:

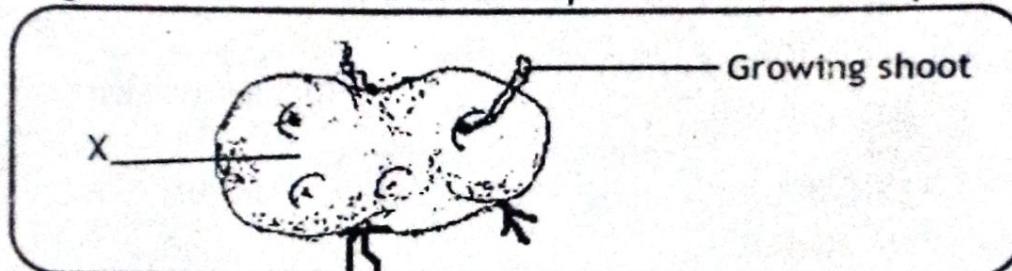
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Team Head Science Dept.

SECTION .A. (40 Marks)

1. Name the form of energy that enables most animals to hear.
2. State the function of the tongue in the human body.
3. Give any one importance of litter in a poultry house.
4. State the reason why farmers usually soak their seeds before sowing them.
5. In which one way does mulching help to control soil erosion?

The diagram below shows a tuber crop. Use it to answer questions 6 and 7.

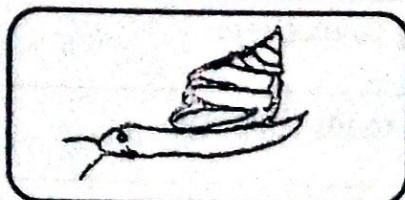


6. To which group of tuber crops does the one in the above diagram belong?
7. How is part X useful to the growing shoots of the tuber above?
8. Mention any one good health habit done by people before eating food.
9. Which injury is caused by direct body contact with hot porridge?
10. Give a reason why a spider is called an arthropod.
11. In which type of weather do overhead electric wires appear bent?
12. How best can HIV positive mothers safeguard their newly born babies from getting HIV/AIDS?
13. State one advantage of using modern bee hives in bee keeping.
14. Write any one example of pest damages among annual crops.

15. Name the plant process that increases the amount of oxygen in the atmosphere.

16. State the common way hookworms enter the human body.

The diagram below shows a common invertebrate. use it to answer question 17.



17. To which group of invertebrates does the above animal belong?

18. Apart from protection, give one other reason why a chameleon changes its colour.

19. State any one danger of drought to food production in an area.

20. State the effect of buoyancy (upthrust force) to objects thrown in water.

21. Write down any one type of records kept on a rabbit farm.

22. Mention any one activity done to promote water and sanitation in our community.

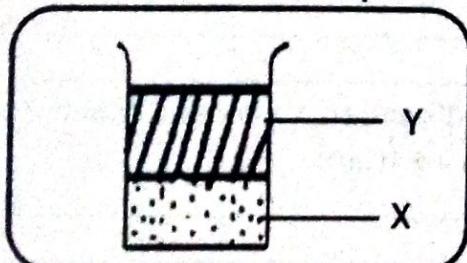
23. Give any one example of primates.

24. State a reason why there is a lower rate of transpiration at night.

25. What happens to substances like salt and sugar when put in water?

26. State any one rabbit disease that attacks poultry.

A P.6 pupil mixed oil with water in a container and the two liquids settled as shown below. Use it to answer questions 27 and 28.



27. Name the substance marked X.

28. State the reason why the two liquids settled as shown in the container above.

29. Give any one place that needs to be cleaned at school.

30. Give any one advantage of breastfeeding to mothers.

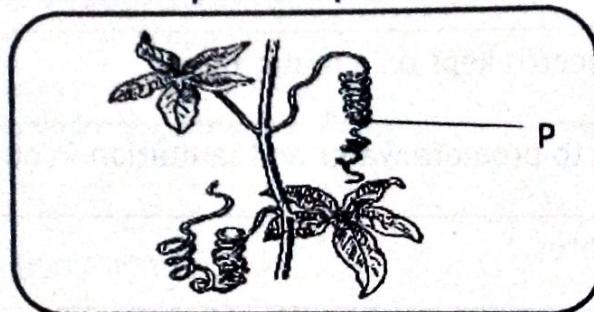
31. Mention the type of weather that makes roads slippery.

32. How is the property "Air exerts pressure" useful to doctors?

33. Define the term "soil leaching."

34. Mention the food value that boosts the body's immunity.

The diagram below shows part of a passion fruit plant. Use it to answer question 35.



35. Name the structure marked P.

36. State the role of water during germination.

37. Mention any one example of organic manure.

38. How is a kink important in the use of a clinical thermometer?

39. Alice's child has swollen limbs, little brown hair and swollen abdomen. Which deficiency disease is Alice's child likely to be suffering from?

40. Which type of honey bees defends the colony against enemies?

SECTION .B. (60 Marks)

41. (a) Name any two exotic breeds of sheep.

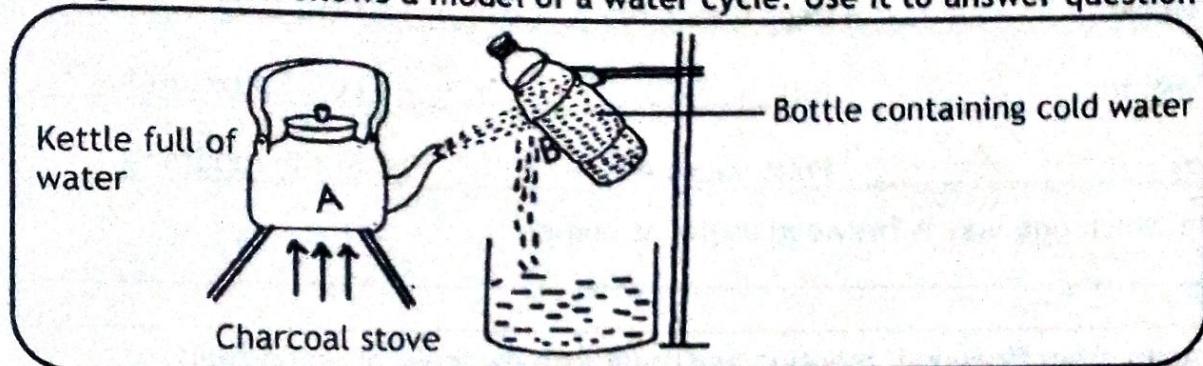
(i) _____

(ii) _____

(b) State any one advantage of keeping sheep using free range method.

(c) Give any one product got from sheep.

The diagram below shows a model of a water cycle. Use it to answer question 42.



42. (a) What do the following represent in nature;

(i) kettle full of water?

(ii) charcoal stove?

(b) How is the bottle containing cold water useful in the above experiment?

(c) Name the physical process marked A.

43. (a) Mention any one example of bony fish.

(b) In which way is swim bladder useful to bony fish?

(c) State a reason why a fish dies when removed from water.

(d) Which type of fertilization do fish undergo?

44. (a) Name any two natural sources of water in the environment.

(i) _____

(ii) _____

(b) State any one way water sources can be protected in our communities.

(c) Give any one activity done at home that involves the use of water.

45. Study the table below and complete it correctly.

Age	Vaccine	Site
At birth	(i) _____	Right upper thigh
6 weeks	Hep. B vaccine	(ii) _____
9 months	(iii) _____	Left upper arm
(iv) _____	Polio vaccine	In the mouth

46. (a) In which one way is firewood useful at home?

(b) Apart from firewood, mention any other one example of wood fuel.

(c) State one way the use of firewood destroys the environment.

(d) How can firewood be used sparingly at home?

47. (a) Mention any two activities done to promote proper personal hygiene.

(i) _____

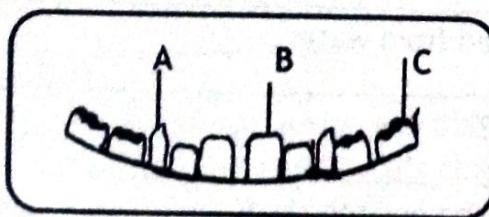
(ii) _____

(b) State any two reasons why schoolchildren are encouraged to observe proper personal hygiene

(i) _____

(ii) _____

The diagram below shows milk teeth in the lower jaw of humans. Use it to answer question 48.



48. (a) Name the tooth marked;

(i) A _____

(ii) C _____

(b) State the function of the tooth marked B.

(c) How is tooth marked A adapted to its function?

49. (a) Why is rusting called a chemical change?

(b) In which two ways is rusting dangerous to metals?

(i) _____

(ii) _____

(c) Apart from rusting, mention any other example of chemical changes.

50. (a) Mention any one material got from swamps used to make things at home.

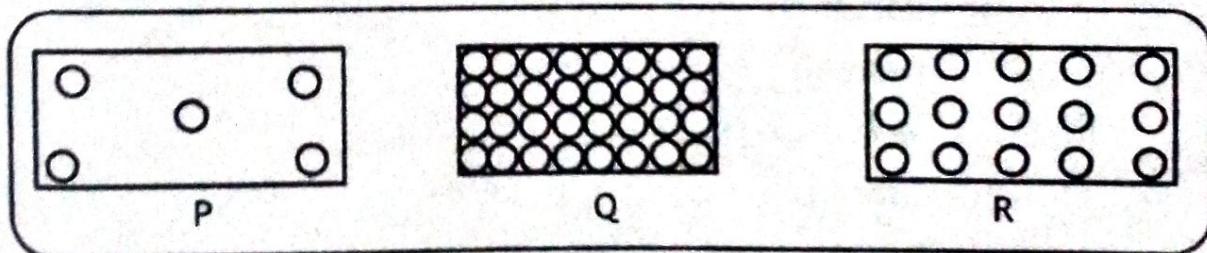
(b) How are the following items useful at home;

(i) mortar?

(ii) mats?

(c) Give a reason why ceramics should be handled with care.

Study and use the diagrams below of arrangement of molecules in different states of matter to answer question 51.



51. (a) Identify the state of matter whose molecules are shown in;

(i) P _____

(ii) R _____

(b) By what process does heat travel through molecules in Q?

(c) Give any one example of matter whose molecules are shown in R.

52. (a) How are lungs similar to the heart in terms of their location?

(b) State the function of lungs in the human body.

(c) Mention any two ways of keeping the heart in proper working conditions.

- (i) _____
(ii) _____

53. (a) Write ORS in full.

(b) State any one solute involved in making ORS.

(c) Why should an individual wash hands before preparing ORS?

(d) Which condition of the human body is treated using ORS?

54. (a) Give any two useful fungi in the environment.

- (i) _____
(ii) _____

(b) Mention any two ways in which fungi can be useful to humans.

- (i) _____
(ii) _____

55. Match the following animals with their habitats.

List A

- fish
hare
spider
sunbird
- cobweb
nest
burrow
water

List B

- (i) cow _____
(ii) hare _____
(iii) spider _____
(iv) sunbird _____

END

BROAD EXAMINATIONS GUIDES
P.6 SCIENCE MID - TERM I 2024

QN	CORRECT ANSWER(S)	CLASS	RELATED CONTENT
1.	Sound energy	P.6	- sources of sound energy. - storing of sound energy.
2.	For tasting	P.4	- location of body organs. - how the body functions.
3.	Litter prevents dampness in the poultry house / prevents egg breakages.	P.5	- systems used to rear poultry. - their advantages.
4.	To soften their testa which eases germination.	P.4	- conditions necessary for germination. - their importance.
5.	Mulches reduce the speed of flowing water.	P.4	- meaning of mulching. - importance of mulching.
6.	Stem tuber crops.	P.5	- root tubers. - how to care for root tubers.
7.	Part X supplies food to the growing shoots.	P.5	- diseases that affect tuber crops. - their pests.
8.	Washing hands with clean water and soap.	P.4	- reasons why people eat. - components of a balanced diet.
9.	Scald	P.4	- difference between burns and scalds. - first aid.
10.	It has jointed legs and a segmented body.	P.6	- classification table of animals. - their classes and examples.
11.	Sunny weather	P.5	- meaning of heat on matter. - natural sources of heat energy.
12.	By using bottle feeding method.	P.3	- HIV and AIDS in full. - signs of HIV/AIDS.
13.	There is easy harvesting of honey / easy inspection of honey / they are durable.	P.5	- types of bees. - duties of bees.
14.	Yellowish of leaves / spots on plant leaves / stunted growth / rotting of some parts / deformed stems.	P.4	- examples of pests and diseases. - how to control pests and diseases.
15.	Photosynthesis	P.4	- raw materials for photosynthesis. - conditions.
16.	Through bare feet / skin	P.4	- other types of intestinal worms. - their effects on the body.
17.	Molluscs	P.6	- classes of invertebrates. - their characteristics.
18.	It easily traps its preys.	P.6	- examples of lizards. - their diagrams.

19.	Drought destroys unharvested crops which lowers crop production.	P.4	- meaning of drought. - other natural changes. - gravitational force. - why objects weigh less on the moon.
20.	It reduces the weight of objects thrown in water.	P.4	- exotic breeds of rabbits. - diseases of rabbits. - other elements of PHC. - importance of PHC.
21.	Health records / feeding records / production records / sales records.	P.4	- classes of mammals. - their characteristics.
22.	Fencing around open water sources / planting short grass around water sources.	P.5	- factors that affect the rate of transpiration. - importance of transpiration.
23.	Monkey / gorilla / baboon / chimpanzee	P.6	- mixture. <small>How to separate mixtures.</small>
24.	There is low temperature at night.	P.4	- how to care for rabbits - rabbit hutches (types)
25.	They dissolve.	P.5	- meaning of density. - calculations on density.
26.	Pneumonia / coccidiosis	P.4	- differences between mass and weight. - floating and sinking objects.
27.	water	P.5	- meaning of sanitation. - importance of sanitation.
28.	Liquid Y is less dense than liquid X.	P.5	- meaning of bottle feeding. - advantages of bottle feeding.
29.	Latrine / classrooms / compound.	P.4	- types of weather. - how to manage weather changes.
30.	It delays the next pregnancy / saves time / cheap to manage / creates natural love between the mother and the baby.	P.5	- properties of air. - components of air.
31.	Rainy weather.	P.4	- causes of soil exhaustion.
32.	It helps a doctor to suck liquid medicine using a syringe.	P.3	- vitamins.
33.	Soil leaching is the movement of soil nutrients from the upper layers to the lower layers of the soil where plant roots cannot reach.	P.5	- meaning of immunity. - importance of immunity.
34.	Tendril.	P.4	- types of stems. - functions of stems in plants
35.	Water softens the testa for the plumule and radicle to pass through.	P.4	- meaning of germination. - types of germination.
36.	Compost manure / green manure / farm yard manure / organic mulches.	P.5	- advantages of natural fertilizers over artificial fertilizers.
37.	A kink prevents the back flow of mercury before the doctor takes readings.	P.5	- types of thermometers. - thermometric liquids.

39.	Kwashiorkor	P.4	- deficiency diseases. - their causes.
40.	Worker bees.	P.5	- duties of worker bees. - causes of bee swarming.

SECTION B

41.	(a) merino sheep / Corriedale / Romney marsh / Rambouillet (b) sheep feed on a balanced diet / perform enough physical exercises. (c) wool / mutton / hooves.	P.5	- local breeds of sheep. - docking and sheep shearing.
42.	(a) (i) water body (ii) The sun (b) For condensing the steam. (c) Evaporation.	P.4	- uses of rain water. - dangers of too much rainfall.
43.	(a) Tilapia / Nile perch / salmon fish / trout (b) A swim bladder keeps fish buoyant in water. (c) It lacks dissolved oxygen in water. (d) External fertilization.	P.5	- structures of a fish. - functions and parts.
44.	(a) lakes / rivers / rain (b) By fencing around them / discouraging people from dumping untreated wastes into water sources. (c) washing clothes / mopping cemented houses.	P.3	- how water gets contaminated the source. - accidents that occur near water sources
45.	(i) BCG vaccine (ii) left upper thigh (iii) measles vaccine (iv) At birth	P.5	- importance of immunization to children. - types of vaccines.
46.	(a) It is used for cooking. (b) charcoal / saw dust (c) It leads to production of smoke which pollutes air. (d) By putting out fire after use / covering food when cooking / soaking hard dry foods before cooking them.	P.3	- dangers of heat energy. - how to save wood fuel.
47.	(a) Bathing daily / cutting fingernails short / combing hair / washing clothes. (b) To prevent skin diseases / prevents bad body smell.	P.4	- dangers of poor personal hygiene. - diseases that result from poor personal hygiene.
48.	(a) (i) canine tooth (ii) premolar tooth (b) Tooth marked B is used for cutting / biting food.	P.4	- disorders of teeth. - diseases that affect teeth.

	(c) Tooth A is sharp pointed to tear food.		
49.	(a) Rusting is irreversible / forms a new substance / there is change in mass and weight. (b) rusting weakens metals / changes the colour of metals / leads to wearing out of metals / causes holes on metals. (c) Decomposition / weathering of rocks / boiling of an egg.	P.5	<ul style="list-style-type: none"> - ways of preventing rusting, - importance of rusting to a crop farmer.
50.	(a) swamp grass / papyrus / clay. (b) (i) Used in pounding some foods such as groundnuts. (ii) It is used as a seat. (c) to prevent them from breaking since they are delicate.	P.2	<ul style="list-style-type: none"> - sources of materials used to make play materials. - uses of play materials to school children.
51.	(a) (i) Gas state (ii) liquid state (b) By conduction. (c) water / porridge / milk	P.5	<ul style="list-style-type: none"> - properties of matter. - properties of solids, liquids and gases.
52.	(a) Both the lungs and the heart are located in the chest cavity. (b) For exchange of gases / breathing. (c) By performing regular physical exercises / feeding on a balanced diet / avoid drug abuse.	P.4	<ul style="list-style-type: none"> - materials needed by the body to function. - functions of organs.
53.	(a) Oral Rehydration Solution. (b) salt (c) To prevent contamination of ORS. (d) Dehydration.	P.4	<ul style="list-style-type: none"> - causes of dehydration - how to make ORS.
54.	(a) Mushrooms / yeast / penicillia (b) Some fungi are eaten as food / yeast helps in baking / penicillium mould is used to make penicillin.	P.5	<ul style="list-style-type: none"> - dangers caused by fungi. - similarities between fungi and bacteria.
55.	(i) water (ii) burrow (iii) cobweb (iv) nest	P.2	<ul style="list-style-type: none"> - meaning of domestic animals. - why people should not live with domestic animals in the same house.

END