



# BROAD EXAMINATIONS®

## P.7 INTEGRATED SCIENCE EXAMINATION TRIAL SET I TERM I - 2023

Time allowed: 2 hours 15 minutes.

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.

### 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**

Approved by:

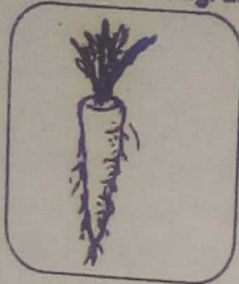
*Agumbe*

Team Head Science Dept.

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

1. State the use of a dustbin in a classroom.

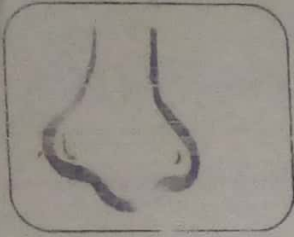
Below is a diagram of a tuber crop. Use it to answer question 2.



2. Mention the food value got from above the tuber crop.
3. In which one way is the skeletal system related to the circulatory system?
4. Mention the reproductive part of a plant.
5. Give a reason why a frog is able to live both on land and in water.
6. State the reason why poultry farmers sometimes shorten the upper beaks of their layers.
7. Mention type of the soil used in making ceramics.
8. In which way is a pumice stone important in promoting proper personal hygiene?
9. What general name is given to drugs used to treat bacterial diseases?
10. Give a reason why rabbit keepers raise hutches above the ground.
11. State any one use of banana fibres to a P.4 child in the study of basic technology.
12. How are conifers different from other non-flowering plants in terms of reproduction?



The diagram below is a body organ, use it to answer question 13.



13. In which way is the above organ useful to a P.7 candidate?

---

---

14. How does the draining of stagnant water control the spread of malaria to humans?

---

---

15. Name the longest and strongest bone in the human skeleton.

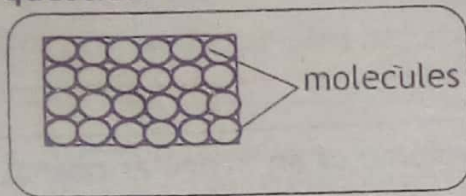
---

16. In which way is a flossing string important in promotion of oral health?

---

---

The diagram below shows the arrangement of molecules in a state of matter. Use it to answer question 17.



17. Identify the state of matter shown above.

---

18. Give any one effect of passive smoking on human health.

---

---

19. Name the weather instrument used to measure amount of rainfall received in an area.

---

20. Suggest the reason why it is a good practice to wash hands with soap and water after visiting a latrine.

---

---

21. In which way is an umbrella useful to a person during sunny weather?

---

---

22. Mention an amphibian with a tail.

---

23. Give any one advantage of breastfeeding to a baby.

---

---

24. In which way does diarrhoea lead to dehydration?

25. Mention a tool used in cutting fingernails short.

26. Give a reason why workers are called female sterile bees.

27. Identify an exotic dairy breed of cattle that produces a lot of milk.

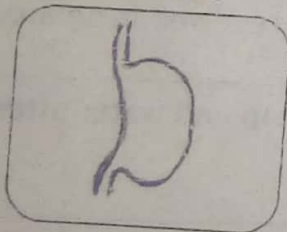
28. In which way are cilia important in the human nose?

29. State a reason why the legs of a person who has fainted are raised higher than the head when giving first aid.

30. Name an instrument used to measure the volume of an irregular object.

31. In which way are red blood cells adapted to their function?

Below is a diagram showing a component of alimentary canal. Study it and answer question 32.



32. Mention the digestive juice secreted by the above part.

33. Mention an accident caused by hot charcoal to a human being.

34. Give **one** way the pitch of sound produced by a guitar can be changed.

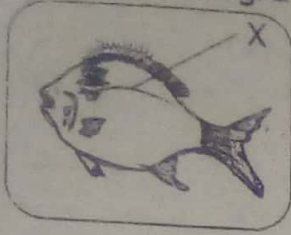
35. How is the practice of docking important to a ewe?

36. Name the source of energy got when plants are burnt in a limited supply of oxygen.



37. In which way are nimbus clouds important to a crop farmer?

Below is a diagram of a fish. Use it to answer question 38.



38. Mention the function of part marked X to a fish.

39. In which way are air sacs important in the human respiratory system?

40. What does letter 'S' stand for in the word PLASCY?

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

41. (a) Give any two examples of non-flowering plants that reproduce by means of spores.

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

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

(b) Mention any two examples of conifers.

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

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

42. (a) In which way is a constriction an important part of a clinical thermometer?

(b) Give any one reason why mercury is preferred for use in a clinical thermometer.

(c) Mention any two parts of the body where a clinical thermometer is put to measure accurate body temperature.

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

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

43. (a) In which way can used straws be important to a P.4 child?

(b) Mention any two local materials used in the environment to make play materials.

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

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

(c) How are ropes useful in making a P.4 child physically fit?

44. (a) Mention a germ that causes Covid-19.

(b) Give any two ways how Covid-19 is spread to humans.

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

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

(c) State one way how the spread of Covid-19 can be controlled.

45. (a) In which way are wasps harmful to man?

(b) Give two examples of social insects.

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

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

(c) In which way is a butterfly unfriendly to a crop farmer during its larva stage?

46. (a) Name the part of the human skeleton that protects the spinal cord.

(b) Give two examples of short bones in the human body.

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

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

(c) Identify one disorder of skeletal system in man.

47. (a) Mention two examples of stem tubers.

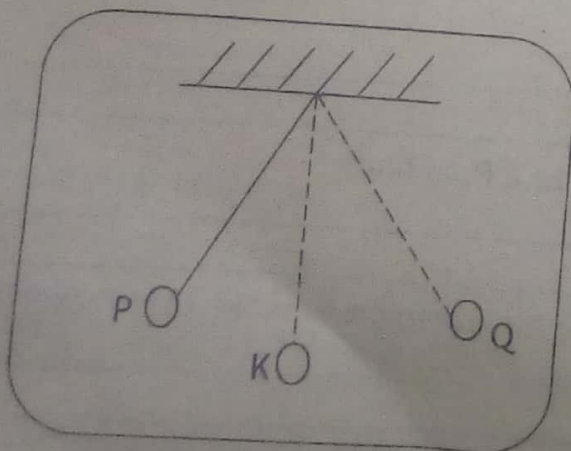
(i) \_\_\_\_\_

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

(b) Give any one common disease of cassava.

(c) Write down one way of controlling diseases that attack cassava in the garden.

48. The diagram below shows a ball being kicked by a foot baller. Use it to answer questions that follow.





(a) What type of energy is possessed by a ball at P before being kicked?

(b) Give a reason to support your answer in (a) above.

(c) State the energy change that takes place when the ball moves from P to K.

(d) Name the form of energy produced when the ball is kicked.

49. (a) How is cochlea important in the process of hearing?

(b) Name two parts of the ear that are not involved in the process of hearing.

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

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

(c) State the difference in function between the two parts of the ear you have named in (b) above.

50. (a) In which way does deforestation lead to soil erosion?

(b) Mention any two other causes of soil erosion.

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

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

(c) Give one way soil erosion can be controlled in the school compound.

51. (a) What are annual crops?

(b) Give any two examples of annual crops.

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

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

(c) Give one crop growing practice that maintains moisture in the soil.

52. Match artificial methods of vegetative propagation in list M to their meanings in list N.

List M

List N

Budding

the branch of a mother plant is bent to touch the soil.

Grafting

a ring is cut through the back of a branch to allow roots develop.

Layering

involves the union of scion to the stock of another plant.

Marcotting

dormant bud from a plant is fixed into the shoot system of another.

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

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

(iii) Layering \_\_\_\_\_

(iv) Marcotting \_\_\_\_\_

53. (a) Give a reason why respiration is a chemical change.

(b) Name two by-products given out by respiration as a chemical change.

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

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

(c) In which one way is respiration important to man?

54. (a) Give two ways in which plants are used as resources by man.

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

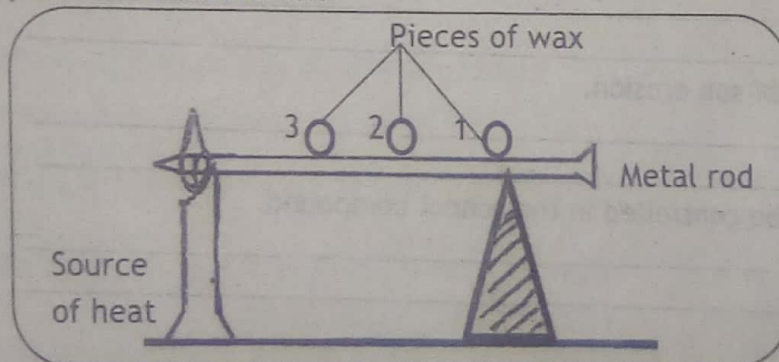
(ii) \_\_\_\_\_

(b) State two ways man can conserve plants in the environment.

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

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

55. The diagram below shows the method of heat transfer in matter. Use it to answer questions that follow.



(a) Which wax melts first?

(b) Give a reason for your answer.

(c) Mention the method of heat transfer shown above.

(d) State one use of the heat transfer you have mentioned in 55(c) above.

END



ANSWER(S)

For proper disposal of rubbish

Pur	S	Q	ANSWER(S)	CLASS	RELATED CON
		1	Vitamin A	P.4	- Structure
		2		P.5	- Diseases
		3	Skeletal system protects the heart which pumps blood to all body parts/the skeleton produces blood cells.	P.7	- Examples
		4	Flower	P.7	- Diseases
		5	A frog has moist skin for breathing when in water and lungs for breathing when on land.	P.4	- them
		6	To prevent egg eating.	P.6	- Structure
		7	Clay soil	P.5	- Major type
		8	It is used to remove dirt from feet.	P.6	- Structure
		9	Antibiotics	P.5	- Parts and
		10	To prevent dampness in the hutch/to protect rabbits from their predators.	P.2	- Classes of
		11	A P.4 child uses banana fibres to make play materials (dolls, balls, ropes)	P.5	- Examples
		12	Conifers reproduce by means of seeds while other non-flowering plants reproduce by means of spores.	P.2	- Types of p
		13	It enables a P.7 candidate to smell.	P.2	- Methods
		14	It destroys the breeding places for mosquitoes that spread malaria (anopheles mosquitoes).	P.2	- poultry
		15	Femur	P.5	- Why heat
		16	It is used to remove plague from teeth.	P.4	- made mate
		17	Solid state	P.5	- Uses of su

18. It leads to lung cancer/stomach ulcers/cancer of the throat.
19. Rain gauge
20. It kills germs on hands.
21. An umbrella protects a person from strong sunshine.
22. Salamander
23. Breast milk contains a balanced diet/is always at right temperature/is easily digested/is always ready and clean.
24. Through passing out watery stools.
25. Razor blade/nail cutter
26. They have undeveloped reproductive system.
27. Friesian
28. Cilia filter air entering the nose.
29. To enable oxygenated blood flow to the brain.
30. Eureka (overflow can)/measuring cylinder.
31. They have haemoglobin to enable them carry oxygen.
32. Gastric juice
33. A burn



By tightening or loosening the strings

It eases mating.

36. Charcoal

37. They bring steady rainfall which supports the growth of crops.

38. It detects sound waves in water/movements in water/enemies in water.

39. They are used for gaseous exchange.

40. Strategy

#### SECTION B

41. (a) Mosses/ferns/liverworts/hornworts/horsetail  
(b) Pine/podo/cedar/cypress etc

42. (a) It prevents the backflow of mercury before the health worker takes readings.  
(b) Mercury does not wet the glass tube/has uniform expansion/easily seen through the glass tube.  
(c) In the mouth under the tongue/anus/armpit/etc

43. (a) They are used to make toys/play materials  
(b) Sisal/banana fibres  
(c) Ropes are used for skipping

44. (a) Corona Virus  
(b) Through breathing in contaminated air/hugging infected people/touching contaminated surfaces/etc  
(c) By wearing a face mask/regular washing of hands using soap/isolating infected people.

45. (a) They sting man.  
(b) Red ants/termites/bees  
(c) It damages crops.

46. (a) Backbone/the spine/vertebral column  
(b) Tarsals/carpals  
(c) Dislocation/sprain/fractures

47. (a) White yams/Irish potatoes  
(b) Cassava mosaic/cassava wilt.

	(c) Weeding cassava/spraying using chemicals/planting disease resistant varieties/removing infected cassava.		- Character pests
48.	(a) Potential energy (b) The ball is at rest. (c) Potential energy changes to kinetic energy. (d) Sound energy	P.5	- Forms - Energy
49.	(a) Cochlea converts sound vibrations into nerve impulses. (b) Eustachian tube/semicircular canals (c) Eustachian tube is used for balancing air pressure inside the ear with atmospheric while semicircular canals are used for body balances.	P.6	Disorders How to care ear
50.	(a) By leaving the soil bare exposing it to erosion agents. (b) Bush burning/over cultivation/monocropping/over grazing. (c) By planting short grass in the compound.	P.5	- Meaning - Effect
51.	(a) Annual crops are crops which take less than a year to mature. (b) Beans/maize/wheat/groundnuts/cotton/etc (c) Mulching	P.4	- Caring - Disease control
52.	(i) dormant bud from a plant is fixed into the shoot system of another. (ii) involves the union of scion to the stock of another plant. (iii) the branch of a mother plant is bent to touch the soil. (iv) a ring is cut through the back of a branch to allow roots develop.	P.6	- Character monocro - Advent vegetat propaga
53.	(a) It forms a new substance/it is irreversible/there is change in mass and weight. (b) Carbon dioxide/water vapour (c) It enables man to get energy.	P.5	- Similar biological change - Example
54.	(a) Man uses plants to make herbal medicine/to get poles for building houses/plants provide shade to man/provide oxygen to man for reproduction. (b) Through afforestation/re-afforestation/discouraging people from carrying out deforestation.	P.6	- Types of - How to type of
55.	(a) Wax (b) It is nearest the source of heat. (c) Conduction (d) It is used in ironing clothes/used in cooking food	P.5	- Natural energy Effects matter