



# BROAD EXAMINATIONS®

## P.7 INTEGRATED SCIENCE EXAMINATION

### MID - TERM I 2024

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		
<b>TOTAL</b>		

**Teacher's comment to the learner**

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Approved by:

*[Signature]*

Team Head Science Dept.

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

1. Name the human body organ protected by the skull.

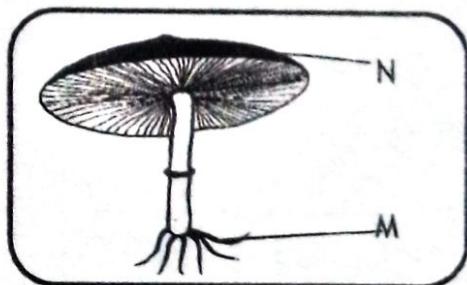
2. Give a reason why soft boards are put in cinema halls.

3. Of what importance are PIASCY messages to schoolchildren?

4. What happens to ice when it is put in direct sunshine?

5. Suggest any one way rabbit farmers can ensure easy circulation of air in their hutches.

The diagram below shows a fungus, use it to answer questions 6 and 7.



6. Name the part marked N.

7. How is part marked M useful to the above fungus?

8. Why is it not good to wear dirty clothes?

9. Name the breed of goats kept for mohair.

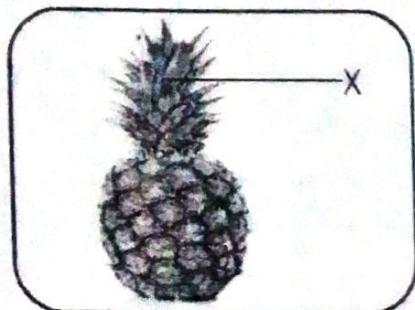
10. State a reason why biceps and triceps are called antagonistic muscles.

11. In which way do diarrhoeal diseases lead to dehydration?

12. Mention any one example of non-living renewable energy resources.

13. Give any one food stuff rich in proteins.

Use the diagram of a pineapple below to answer question 14.



14. Name the part marked X sometimes used for pineapple propagation.

15. State any one advantage of switching off electricity after using it.

16. Why is sheep shearing usually done in the dry season?

\_\_\_\_\_

17. State the recommended first aid for fever.

\_\_\_\_\_

18. Mention any one indicator of poor personal hygiene among schoolchildren.

\_\_\_\_\_

19. What name is given to particles of an atom which don't carry any charge?

\_\_\_\_\_

20. How is a forked hoe useful to crop farmers?

\_\_\_\_\_

21. Mention any one biological change that occurs both in plants and animals.

\_\_\_\_\_

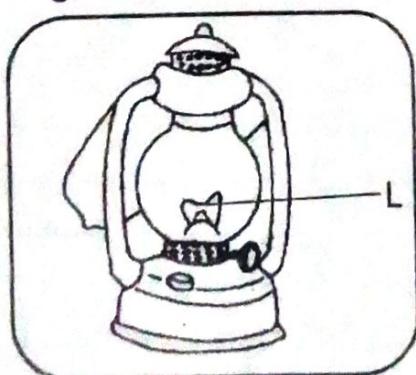
22. As a P.7 candidate, how can you prevent other pupils from smoking?

\_\_\_\_\_

23. Why is it a good practice to keep drugs out of reach of children in a home?

\_\_\_\_\_

The diagram below shows a lantern lamp. Use it to answer question 24.



24. Mention any one form of energy produced at L.

25. State the role of the sun in the water cycle.

26. Suggest a reason why weaning babies are given soft foods.

27. In which one way are testes of humans similar to anthers of flowers?

28. Name the body organ used for filtering blood.

29. State any one effect of alcoholism to an individual.

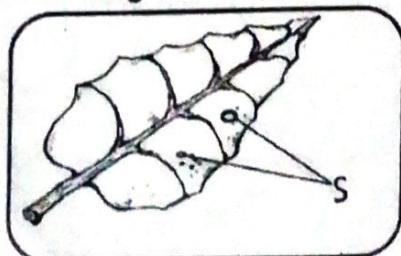
30. Write down one example of short bones found on the human skeleton.

31. Give any one advantage of carrying out steaming up on a dairy farm.

32. Mention any one way of making washed clothes dry faster.

33. In which one way is saliva useful during digestion of food?

Use the diagram of a leaf below to answer question 34.



34. How are holes marked S useful to a plant?

35. Give a reason why weeds should be removed from a tuber crop garden.

36. Which feature on an ordinary pit latrine prevents houseflies from entering into the pit?

37. How does gonorrhoea disease in pregnant women affect the unborn babies?

38. Give a reason why laying nests should be put in dark places in a poultry house.

39. How does the diaphragm behave during exhalation?

40. Mention any one example of crops that take less than a year to grow and mature.

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

41. (a) Mention any two weather conditions managed by using umbrellas.

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

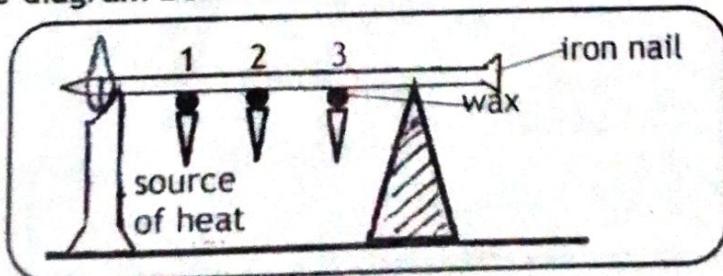
(ii) \_\_\_\_\_

(b) How are the following weather instruments useful at a weather station;

(i) barometer?

(ii) anemometer?

The diagram below shows a method of heat transfer. Use it to answer question 42.



42. (a) Which pin will fall last?

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

(c) By what process will heat reach the pins?

(d) State the use of heat transfer shown in the above diagram to a mother at home.

43. (a) Mention the component of air that enables plants to make food.

(b) In which two ways is the property of air "air exerts pressure" useful in our daily life?

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

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

(c) Mention any one disease spread through breathing in contaminated air.

44. (a) State the two physical processes involved in the distillation of alcohol.

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

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

(b) Mention a reason why the delivery tube is coiled when distilling alcohol.

\_\_\_\_\_

(c) Write any one use of alcohol in hospitals.

45. (a) Apart from bees, name any one other insect that pollinates flowers.

(b) Mention any two characteristics of flowers that are pollinated by insects.

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

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

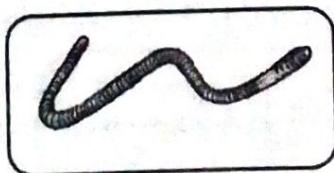
(c) Which process in sexual reproduction of plants follows pollination?

The diagrams below show different animals. Use them to answer question 46.

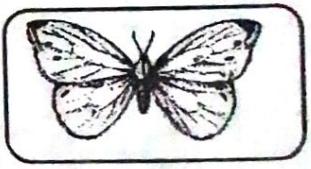
R



S



T



46. (a) To which group of invertebrates do the following animals belong;

(i) R? \_\_\_\_\_

(ii) T? \_\_\_\_\_

(b) How does animal marked S breathe?

\_\_\_\_\_

(c) Mention any one animal that belongs in the same group as animal marked R.

47. (a) What determines sinking and floating of objects?

(b) Write down one object that sinks in water.

(c) Give a reason why some objects sink in water.

(d) State one difference between mass and volume in terms of units.

48. (a) Mention any one intestinal worm that feeds on blood.

(b) Write any two bad health habits that may lead to worm infestations.

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

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

(c) How best can worm infestations be controlled among children?

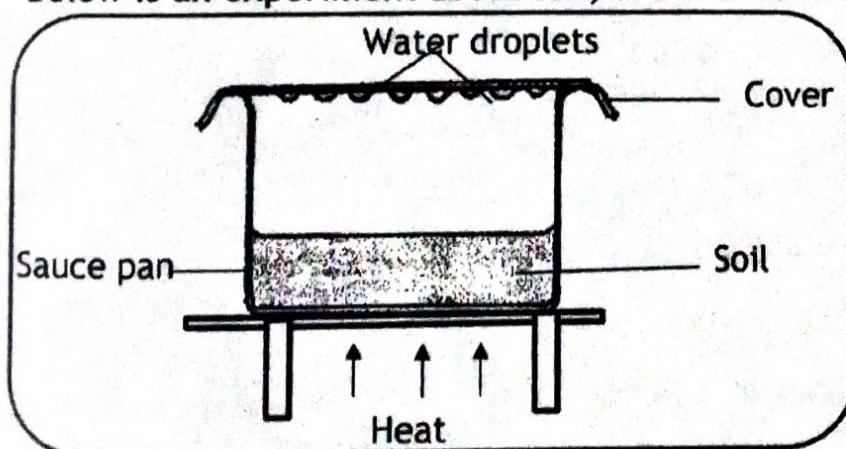
49. (a) How is the heart able to keep blood flowing in one direction?

(b) Which chamber of the heart pumps blood to the lungs?

(c) Why does blood flow to the lungs before it is pumped to the rest of the body?

(d) Write down any one substance carried by blood in the human body.

Below is an experiment about soil, use it to answer question 50.



50. (a) What does the experiment above prove about soil?

(b) By what process are water droplets formed?

(c) State the use of heat in the above experiment.

(d) Apart from water, name any one other component of the soil.

51. (a) Mention any two ways of making water safe for drinking.

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

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

(b) Name any two diseases that may result from drinking contaminated water.

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

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

52. (a) Mention any two items made from clay.

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

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

(b) Suggest a reason why items made from clay should be handled with care.

(c) Which practice is done to make clay-made items harder?

53. (a) Mention the type of movable joint found at the;

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

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

(b) State the function of synovial fluid found at joints.

(c) State the role of joints in the proper working of the skeletal system.

54. Match the following vectors with their germs they carry.

Vector

Female anopheles mosquito

Germ

onchocerca volvulus

Housefly

trypanosome

Black fly

plasmodia

Tsetse fly

trachomatis

(i) Female anopheles mosquito \_\_\_\_\_

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

(iii) Black fly \_\_\_\_\_

(iv) Tsetse fly \_\_\_\_\_

55. (a) In which two ways can P.7 candidates promote PHC at school?

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

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

(b) Which element of PHC encourages production of healthy babies among women?

(c) In which way do pregnant women promote the element of PHC you have named in

(b) above?

END

**BROAD EXAMINATIONS GUIDES**  
**P.7 SCIENCE MID - TERM I 2024**

Q.N	CORRECT ANSWER(S)	CLASS	RELATED CONTENT
1.	The brain	P.7	- skeletal diseases. - skeletal disorders.
2.	To reduce echo.	P.6	- importance of echo to people. - how echo is reduced in cinema halls.
3.	They create awareness of HIV/AIDS among school children / prevent school girls from getting early pregnancies / contracting HIV/AIDS.	P.3	- examples of PIASCY messages. - effects of HIV/AIDS.
4.	Ice melts.	P.5	- changes of state of matter. - effects of heat gain on matter.
5.	By constructing rabbit hutches with a wire mesh.	P.4	- types of rabbit hutches. - how to care for rabbits.
6.	Cap	P.5	- harmful fungi. - useful fungi.
7.	Part M absorbs food from dead decaying matter.	P.5	- differences between bacteria and fungi. - uses of bacteria.
8.	It leads to easy spread of skin diseases / leads to bad body smell.	P.4	- meaning of personal hygiene. - indicators of poor personal hygiene.
9.	Angora goat.	P.5	- local breeds of goats. - systems used to rear goats.
10.	They work in pairs and have opposite effect on each other.	P.6	- types of muscles. - functions of muscles.
11.	Through leading to frequent passing out of watery stools.	P.4	- meaning of dehydration. - how to make ORS locally.
12.	Wind / the sun / fast flowing water / geothermal energy / tidal energy.	P.7	- meaning of energy resources. - how to conserve them.
13.	Eggs / meat / beans / soya beans	P.4	- meaning of a balanced diet. - components of a balanced diet.
14.	Crown	P.6	- natural methods of vegetative propagation. - artificial methods of vegetative propagation.
15.	It helps to reduce electricity bills / conserve electricity.	P.3	- meaning of energy. - sources of energy.
16.	To protect sheep from coldness.	P.5	- meaning of sheep shearing. - meaning of docking in sheep.
17.	Tepid sponging using lukewarm water.	P.6	- meaning of fever. - causes of convulsions.
18.	Bad body smell / having dirty teeth / long dirty fingernails / dirty clothes.	P.4	- tools used to promote personal hygiene. - skin diseases.

19.	Neutrons.	P.7	- meaning of electricity. - natural sources of electricity. - diagrams of garden tools. - their uses.
20.	It is used to dig in stony areas.	P.4	- diagrams of garden tools. - their uses.
21.	Reproduction / growth	P.5	- similarities between biological and chemical changes.
22.	By telling them dangers of smoking / advising them to avoid bad social groups.	P.6	- meaning of smoking. - factors that lead to smoking.
23.	To prevent drug poisoning among children / prevent children from contaminating drugs.	P.6	- meaning of a drug. - essential and narcotic drugs.
24.	Light energy.	P.5	- uses of holes on a lantern lamp. - iron box.
25.	The sun heats moist surfaces which causes evaporation.	P.4	- model of water cycle. - components of water cycle.
26.	Babies have not yet developed teeth for chewing hard foods.	P.5	- vulnerable groups. - how to care for them.
27.	Both testes and anthers produce male reproductive cells / are male gonads.	P.6	- meaning of reproduction. - primary sex changes.
28.	The kidney (the kidneys)	P.4	- body organs. - their location and functions.
29.	It leads to bad body smell / brain damage / liver damage / loss of appetite.	P.6	- methods used to make alcohol. - uses of alcohol in the hospital.
30.	Tarsals / carpals	P.7	- types of joints. - where they are located.
31.	It lengthens the peak of lactation period / prevents production of under weight calves / enables an incalf to produce a healthy calf / enhances proper growth of the foetus.	P.6	- meaning of: (i) steaming up (ii) drying off
32.	Wringing.	P.6	- all steps taken to clean clothes. - their importance.
33.	Saliva softens food / lubricates food which eases swallowing.	P.5	- types of digestion. - alimentary canal
34.	For exchange of gases (breathing)	P.4	- parts of shoot system of a plant. - function of each part.
35.	To allow production of high crop yields / control crop pests / control crop diseases.	P.5	- meaning of tuber crops. - examples of stem tubers.
36.	A lid of a pit hole.	P.6	- types of latrines. - their characteristics.
37.	It causes blindness in newly born babies.	P.6	- STDS - their signs and symptoms.
38.	To control egg eating among poultry.	P.5	- poultry vices. - how to control them.
39.	It moves downwards and flattens.	P.6	- structures of respiratory system. - functions of parts.

40.	Millet / sorghum / wheat	P.4	- meaning of perennial crops. - their examples.
41.	(a) rainy weather / sunny weather (b) (i) It measures air pressure. (ii) It measures the speed of wind.	P.4	- types of clouds. - uses of clouds.
42.	(a) pin 3 (b) Pin 3 is nearest the source of heat / nearer the source of heat than other pins. (c) By conduction. (d) It is used in cooking / ironing clothes.	P.5	- meaning of heat energy - natural sources of heat energy
43.	(a) carbon dioxide. (b) It enables people to drink soda using a straw / to pump air into a car tyre / suck liquid medicine into a syringe. (c) COVID 19 / tuberculosis / whooping cough / flu	P.3	- uses of air. - dangers of wind to people.
44.	(a) condensation / evaporation (b) To increase the surface area for condensation of alcohol vapour. (c) It used to sterilize some medical instruments / used to wash wounds / kill germs on surfaces.	P.6	- effects of alcoholism to an individual. - types of alcohol.
45.	(a) butter fly / wasps / moth. (b) they are large and easily seen / have brightly coloured petals / produce heavy pollen grains / produce sticky pollen grains. (c) fertilisation.	P.4	- types of pollination. - how some plants prevent self pollination.
46.	(a) (i) molluscs (ii) insects (b) By using its moist skin. (c) snail / slug / squid / cowrie / oyster	P.6	- classification table of animal. - their characteristics.
47.	(a) Density of objects. (b) coin / stone / brick (c) some objects are more dense than water (d) mass is measured in kilograms/grams while volume is measured in cubic units	P.5	- instruments used in displacement method. - calculations on density, mass, volume.
48.	(a) hookworms (b) Eating under cooked meat / walking bare footed in muddy places / drinking contaminated water. (c) By deworming them regularly / giving them clean food / fully cooked meat. (d) By the help of its valves.	P.4	- effects of worm infestation - intestinal diseases.
49.		P.6	- components of circulatory

	(b) right ventricle. (c) To get rid of carbon dioxide and pick oxygen. (d) Hormones / wastes / oxygen		(i) blood (ii) blood vessels (iii) the heart
50.	(a) soil contains water. (b) By condensation. (c) Heat causes evaporation of water in the soil. (d) soil living organisms / mineral salts / humus / rock particles.	P.5	- types of soil. - their properties.
51.	(a) By boiling it / chemical treatment (b) Diarrhoea / cholera / typhoid / dysentery	P.6	- how water gets dirty in water sources. - water impurities.
52.	(a) clay pot / clay plate / clay charcoal stove. (b) They are delicate / prevent them from breaking. (c) Firing them (baking them)	P.2	- why fire newly made ceramics. - uses of ceramics.
53.	(a) (i) hinge joint (ii) gliding joint (b) It reduces friction at a joint. (c) Joints help the body in movement.	P.7	- characteristics of movable joints - functions of joints
54.	(i) plasmodia (ii) trachomatis (iii) onchocerca volvulus (iv) trypanosome	P.4	- diseases and their disease vectors. - how to control them.
55.	(a) By sweeping their classroom regularly / picking rubbish in the compound / mopping latrines if cemented. (b) Maternal and child health care. (c) Having enough rest / feeding on a balanced diet / performing regular physical exercises	P.5	- PHC in full. - principles of PHC. - individual health life styles.

END