



BROAD EXAMINATIONS®

P.7 INTEGRATED SCIENCE EXAMINATION

TRIAL SET I TERM II 2024

Time allowed: 2 hours 30 minutes.

Random No.	Personal No.

Candidate's Name:.....

Candidate's Signature.....

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		
TOTAL		

Teacher's comment to the learner

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Approved by:

[Signature]

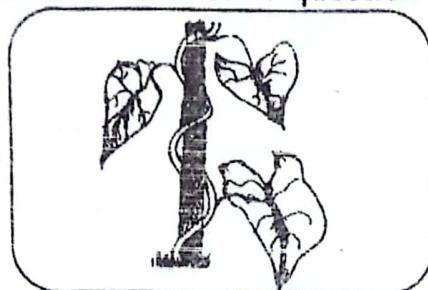
Team Head Science Department

SECTION .A. (40 MARKS)

1. Name the circulatory organ that is protected by the rib cage.
2. Give any one advantage of keeping local breeds of goats over exotic breeds.

3. Give any one reason why a spider is grouped under arthropods.
4. Write down any one example of third class levers.

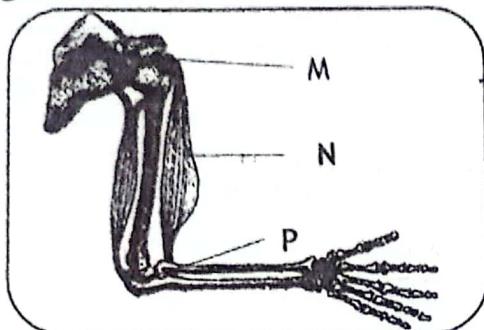
The diagram below shows a method used by weak plants to climb other plants with erect stems. Use it to answer question 5.



5. Name the method shown above.
6. How is a queen excluder important in a modern bee hive?
7. Give one way pitch of sound from a stringed musical instrument can be increased.
8. Name any one crop growing practice that reduces hiding places of pests.
9. What is the difference between mass and weight in terms of their units?
10. How is regular use of nicotine dangerous to human health?
11. By what process does dew disappear from plants during the day?
12. Write down the function of the endosperm of a maize grain.
13. Give any one danger of poor sanitation in a home.

14. How are white blood cells able to defend the body against disease causing germs?

The diagram below shows the human arm. Use it to answer questions 15 and 16.



15. What name is given to the voluntary muscle marked P?

16. State the difference in movement between joints of the human arm marked M and P.

17. Name the component of air used in the preservation of semen used for artificial insemination.

18. Give any one reason for making alloys.

19. Name the protein rich food resource got from water bodies.

20. How does the human body benefit from suffering and recovering from a disease?

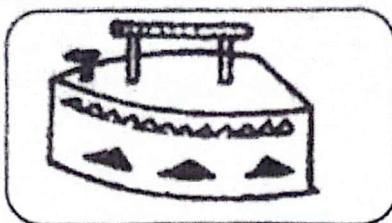
21. Suggest one advantage of steaming up an in-calf cow.

22. Mention any one function of ovaries of the female reproductive system.

23. In which one way is clay soil an important resource to humans?

24. State any one way a magnet can be made to lose its magnetism.

The diagram below shows a common tool in homes. Use it to answer question 25.



25. How is the above tool useful in a home?

26. State the danger of touching a live wire in an electrical installation.

27. Mention the main food value we get from eating mushrooms.

28. Name any one physical change caused by heat loss.

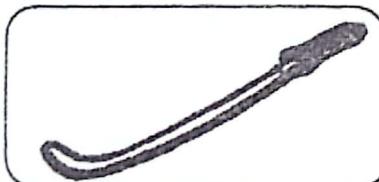
29. Why is it a good health practice to cover leftover food in a home?

30. Mention the body organ that filters blood.

31. Give any one example of root tuber crop pests.

32. State the recommended first aid for fever.

The diagram below shows a tool used in promoting sanitation at school. Use it to answer question 33.



33. How is the above tool important in promoting sanitation at school?

34. In which units is electric current measured?

35. Apart from passion fruit, name any one other example of fruit commonly used in preparing fruit juice at home.

36. How are bacteria different from most fungi in terms of their reproduction?

37. How best can school girls avoid teenage pregnancies?

38. How are incisor teeth adapted to carrying out their function?

39. Mention any one way wind is useful as an energy resource in the environment.

40. Name any one example of scavenger birds in the environment.

SECTION .B. (60 MARKS)

41. (a) Write down any two examples of exotic dairy breeds of cattle.

(i) _____

(ii) _____

(b) Mention any two methods used to preserve milk.

(i) _____

(ii) _____

42. (a) Write down any two functions of muscles in the human body.

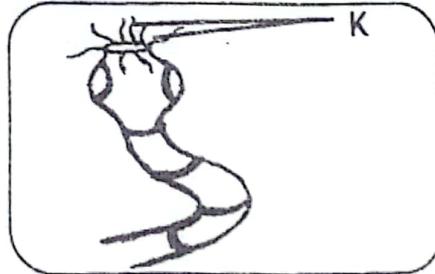
(i) _____

(ii) _____

(b) What name is given to muscles of the human heart?

(c) Suggest any way of improving the functioning of muscles of the human body.

The diagram below shows an intestinal worm. Use it to answer question 43.



43. (a) Name the worm in the diagram above.

(b) How are structures marked K important to the above intestinal worm?

(c) How does the above intestinal worm enter the human body?

(d) What does the above intestinal worm feed on in the human body?

→ (a) What name is given to a person who gives blood to all blood groups?

(b) Write down any two examples of blood groups.

- (i) _____
(ii) _____

(c) Mention any one way of increasing the volume of blood in the body.

5. (a) Write down the two types of energy.

- (i) _____
(ii) _____

(b) State the energy change that occurs when a stationary ball is kicked.

(c) Name any one form of energy got from the sun.

6. (a) State the function of each of the following types of thermometers;

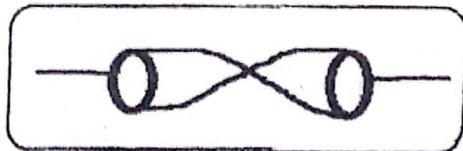
(i) six's thermometer

(ii) clinical thermometer

(b) How is a kink useful in a clinical thermometer?

(c) Centigrade and Fahrenheit are two scales used in measuring temperature. What is the equivalent value of 40°C on a Fahrenheit scale?

The diagram below shows a component of an electric circuit. Use it to answer question 47.



a) What name is given to the above component of an electric circuit?

(d) Of what function is the above component in an electric circuit?

(c) Apart from the above component, name any two other components of a complete electric circuit.

(i) _____

(ii) _____

48. (a) Mention any two examples of religious food taboos.

(i) _____

(ii) _____

(b) State any one advantage and disadvantage of food taboos in a community.

(i) advantage

(ii) disadvantage

49. (a) What name is given to the house of rabbits?

(b) Give any two reasons why a house of rabbits should be constructed with a wire mesh.

(i) _____

(ii) _____

(c) How is dampness prevented in a house of rabbits?

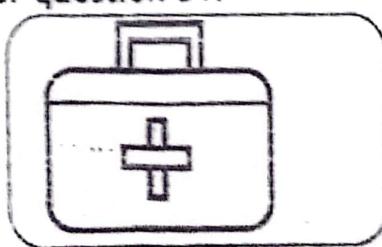
50. (a) What important process takes place in the air sacs found in the human lungs?

(b) Name the gas removed from the body by lungs.

(c) State the reason why the trachea is able to keep open all the time.

(d) What happens to air in the nose when breathing in?

The diagram below shows a container where instruments used in giving first aid are kept. Use it to answer question 51.



1. (a) Name the container shown above.

(b) Give any one place where the above container can be found.

(c) Why is the above container always painted with bright colours?

(d) Name any one item found in the above container.

2. (a) Suggest any one reason why some people abuse drugs.

(b) Apart from nicotine, write down any other two examples of drugs of abuse.

(i) _____

(ii) _____

(c) What name is given to the doctor's written information on how to use a medical drug?

3. (a) How is a vent pipe important on a VIP latrine?

(b) Apart from a vent pipe, write down any one other feature of a VIP latrine.

(c) Suggest any two ways of maintaining latrines at school.

(i) _____

(ii) _____

4. (a) Mention any two products of petroleum.

(i) _____

(ii) _____

(b) Give a reason why the products of petroleum are separated by fractional distillation.

(c) Apart from petroleum, name any one other example of fossil fuels.

5. Complete the table below.

Disease	Vector	Germ
Malaria	Female anopheles mosquito	
	Housefly	Salmonella typhi
Rabies		RBV virus
	Blackfly	Onchocerca volvulus

END

BROAD EXAMINATIONS GUIDES

P.7 SCIENCE SET ONE TERM II 2024

QN	CORRECT ANSWER(S)	CLASS	RELATED CONTENT
1.	The lungs/the heart	P.6	- Components of circulatory system - Components of blood
2.	They are more resistant to diseases than exotic ones/need less care than exotic ones/have higher quality of meat than exotic ones	P.5	- Dairy breeds of goats - Local breeds of goats
3.	It has jointed legs/segmented bodies	P.6	- Classes of arthropods - Their characteristics
4.	The human arm/spade/broom/fishing rod/tweezers/tongs	P.7	- Meaning of levers - Moments (calculations)
5.	Twining/clasping	P.4	- Methods used by plants with weak stems to climb - Types of stems
6.	It separates honey chamber from brood chamber	P.5	- Types of bee hives - Their advantages
7.	By tightening its strings/by reducing the size of its strings	P.6	- Difference between pitch and volume - Factors that affect pitch
8.	Weeding/thinning/pruning	P.4	- Crop growing practices - Their importance
9.	Mass is measured in grams (kilograms) while weight is measured in newtons	P.5	- Meaning of mass and weight - Density and volume
10.	It causes addition to smoking	P.6	- Meaning of smoking - Types of smoking
11.	By evaporation	P.4	- Importance of condensation - Rain cycle
12.	It stores food for the embryo	P.4	- Parts of a maize grain - Functions of its parts
13.	It leads to outbreak of diarrhoeal diseases/bad smell/ it attracts disease vectors/leads to accidents related to poor sanitation	P.4	- Meaning of sanitation - Indicators of poor sanitation
14.	They have no definite shape which enables them to easily engulf and digest germs	P.6	- Functions of blood - Diseases that affect blood
15.	Biceps muscles	P.7	- Meaning of skeleton - Functions of the skeleton
16.	Joint marked M allows movement in all directions while joint P allows movement in only one direction	P.7	- Types of joints - Parts of the body where certain joints are found
17.	Nitrogen	P.6	- Advantages of artificial insemination
18.	To make metals harder/to lower melting point of metals/make metals resistant to corrosion	P.6	- Meaning of alloys - Examples of alloys

19.	Fish	P.4	- Components of a balanced diet. - Functions of food in the body
20.	It enables the body to acquire natural immunity	P.5	- Types of immunity - How the body acquires natural immunity
21.	It lengthens the peak of lactation/prevents low birth weight/enables the cow to produce a lot of milk after calving/enables the foetus to grow healthy.	P.6	- Meaning of lactation period - Meaning of steaming up
22.	They produce oestrogen hormone/produce ova	P.6	- Primary sex changes in boys - Secondary sex changes in boys
23.	It is used to make ceramics/used for pottery	P.2	- Examples of things we make from clay. - Why is clay used
24.	By hammering it/heating it to redness/hitting it onto the ground continuously (leaving it to rust)keeping it facing in East - West direction for a long time/	P.7	- Properties of magnets - Uses of magnets
25.	It is used for ironing clothes	P.5	- Why people iron clothes - How heat travels
26.	It leads to electric shock	P.7	- Meaning of short circuit - How to prevent short circuit
27.	Proteins	P.5	- Examples of fungi Uses of fung.
28.	Condensation/deposition/freezing	P.5	- Changes of states of matter caused by heat gain - Effects of heat loss on matter
29.	It prevents food contamination	P.4	- Meaning of food contamination - How food gets dirty
30.	Kidney (kidneys)	P.4	- Body organs - Their functions
31.	Rats/mole rats/squirrels/monkeys/porcupines/etc.	P.5	- Types of tuber crops - Examples of tuber crops
32.	Tepid sponging /using luke warm water	P.6	- Meaning of fever - Danger of high fever
33.	It is used for slashing tall grass	P.4	- Other tools used in promoting sanitation - How to care for garden tools
34.	Amperes(amps)	P.7	- Meaning of electricity - Natural sources of electricity
35.	Water melon/pineapple/yellow bananas/etc.	P.7	- Meaning of a balanced diet - Deficiency diseases
36.	Bacteria reproduce by binary fission while most fungi reproduce by means of spores	P.5	- Similarities between bacteria and fungi
37.	By abstaining from sex until marriage	P.6	- How HIV/AIDS spreads - Other STDS

38.	They are chisel shaped to cut food	P.4	<ul style="list-style-type: none"> - Teeth diseases - How to prevent teeth disease
39.	Wind is used for winnowing/drying wet clothes/helps in moving windmills/	P.7	<ul style="list-style-type: none"> - Types of energy resources - How to conserve energy/resources
40.	Marabou stork/crow/vulture	P.6	<ul style="list-style-type: none"> - Other classes of birds - How most birds are able to fly
SECTION B			
41.	(a) Friesian/jersey/Guernsey/Jamalcan heifer/brown swiss (b) Refrigeration/sterilization/pasteurization/boiling/	P.6	<ul style="list-style-type: none"> - Diseases that affect cattle - How to control them
42.	(a) Muscles help the body to perform heavy activities/help the body in movement/cardiac muscle of the heart pump blood to all body parts (b) Cardiac muscles (c) By performing regular physical exercises/feeding on a balanced diet/	P.7	<ul style="list-style-type: none"> - Types of muscles - Their examples
43.	(a) Tapeworm (b) They attach the above intestinal worm onto the walls of intestines (c) Through eating under cooked meat/eating unwashed fruits/drinking contaminated water (d) It feeds on digested food.	P.4	<ul style="list-style-type: none"> - Other intestinal worms - Their effects on the human body
44.	(a) Universal donor (b) Blood group A,B,AB,O (c) By taking plenty of fluids/fruit juices/iron supplement tablets/blood transfusion using screened blood/feeding on foods rich in iron	P.6	<ul style="list-style-type: none"> - Diseases that affect blood - Disorders of circulatory system
45.	(a) Potential energy/kinetic energy (b) Potential energy changes to kinetic energy (c) Heat energy/light energy	P.5	<ul style="list-style-type: none"> - Examples of potential energy - Uses of heat energy
46.	(a) (i) It measures the highest and lowest temperature of a place (ii) It is used to measure the human body temperature (b) It prevents the back flow of mercury before readings are taken (c) ${}^{\circ}\text{F} = \frac{9}{5} \times {}^{\circ}\text{C} + 32$ $= \frac{9}{5} \times 40 + 32$ $= 72 + 32$ $= 104 {}^{\circ}\text{F}$	P.5	<ul style="list-style-type: none"> - Differences between heat and temperatures - Natural sources of heat energy

	40°C = 104°F (a) Fuse (b) It breaks the circuit in case of high voltage (c) Voltmeter/ammeter/ohmmeter/appliance/etc.	P.7	- The flow of current and electrons - Uses of electricity
48.	(a) Moslems are not allowed to eat pork/Christians are not allowed to eat meat during lent period/etc. (b) (i) They help in conservation of some plant species/conversation of some animals (ii) They lead to food deficiency diseases/pregnant mothers may be malnourished and produce under weight babies	P.5	- Meaning of food taboos - Factors that affect feeding patterns in an area
49.	(a) Hutch (b) To allow free air circulation in the hutch/to allow light to into the hutch (c) By constructing a raised hutch	P.4	- Types of hutches - Qualities of a good hutch
50.	(a) Gaseous exchange (b) Carbon dioxide (c) It is made up of rings of cartilage (d) It is warmed /moistened/cleaned	P.6	- Raw materials for respiration - Importance of respiration
51.	(a) First aid box (b) In the taxi/bus/school/hospital/clinic/etc. (c) To be easily identified (d) Cotton/gauze/bandage/scissors/etc.	P.4	- Meaning of first aid - Uses of first aid tools
52.	(a) To stay awake/relieve pain/pass time/fit in peer groups/etc. (b) Cocaine/alcohol/opium/miraa/etc. (c) Drug prescription	P.6	- Effects of narcotic drugs - How to prevent narcotic drugs
53.	(a) It lets out bad smell (smelly air) (b) Fly screen/spiral walls/squat hole without a lid. (c) By mopping them if cemented/sweeping rubbish in latrines/removing cobwebs in latrines/	P.6	- Parts of a toilet - Uses of a cesspool emptier
54.	(a) Petrol/diesel/paraffin/jet fuel/etc. (b) They have different boiling points (c) Natural gas/coal/etc.	P.7	- Biogas production - Uses of biogas
55.	(a) Plasmodia, typhoid, rabid dog/rabid cat, river blindness (onchocerciasis)	P.4	- How vectors spread diseases - Examples of disease vectors

END