



BROAD EXAMINATIONS®

P.7 INTEGRATED SCIENCE EXAMINATION TRIAL SET II TERM II 2023

Time allowed: 2 hours 15 minutes.

Random No.	Personal No.

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

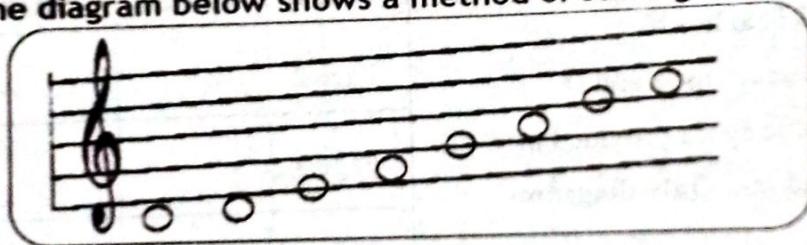
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Approved by:
[Signature]
Team Head Science Dept.

SECTION.A. (40 Marks)

1. In which region of the human body is the liver found?
2. Apart from sugarcane, name one other crop propagated by stem cuttings.
3. State a reason why metal scraps should be recycled.
4. How does cutting of fingernails short help to control the spread of diarrhoeal diseases?
5. Name the longest bone in the human body.
6. State the advantage of keeping dual purpose breeds of chicken.
7. How are incisors adapted to their function of cutting food?

The diagram below shows a method of storing sound. Use it to answer question 8.



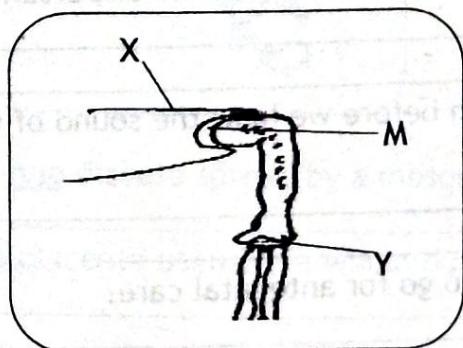
8. Name the method of storing sound shown above.
9. Suggest any one way rabbit keepers ensure proper circulation of air in a hutch.
10. How does breastfeeding improve immunity among babies?
11. State a reason why we are able to see objects around us.
12. In which one way do flowers act as sources of food to bees?
13. Why is coffee called a perennial crop?

14. How does a tube fiddle produce sound?

15. Give any one way dairy farmers can improve on milk production on their farms.

16. Write down the property of air that enables children to play with kites.

The diagram below shows part of a skeleton. Use it to answer question 17 and 18.



17. Name the bone marked X.

18. How is movable joint M different from movable joint Y?

19. What health problem are Atim's children likely to face for not feeding on protein rich foods?

20. Mention any one example of birds that feed on carrion.

21. In which one way do PIASCY messages help to prevent STDs among school children?

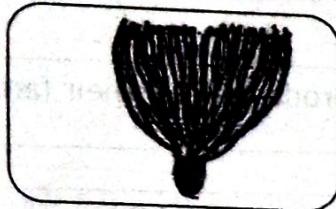
22. State the use of a screen on a VIP latrine.

23. Why are burn casualties discouraged from putting sugar or salt around the burnt part?

24. State one advantage of using single movable pulley over single fixed pulley.

25. Name the diarrhoeal diseases caused by salmonella typhi germs.

The diagram below shows a fruit, use it to answer questions 26 and 27.



26. How is the above fruit dispersed?

27. Write down any one adaptation of the above fruit to its mode of dispersal.

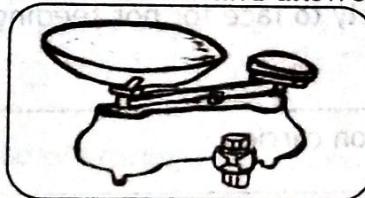
28. State the reason why we see a lightning flash before we hear the sound of thunder during a thunderstorm.

29. Which element of PHC encourages mothers to go for antenatal care?

30. How is the reproduction in bacteria similar to that of amoeba?

31. Name the method of making alcohol that involves condensation.

Use the instrument below and answer question 32.



32. How is the above instrument useful to butchers?

33. Write down one role played by a mother in a family.

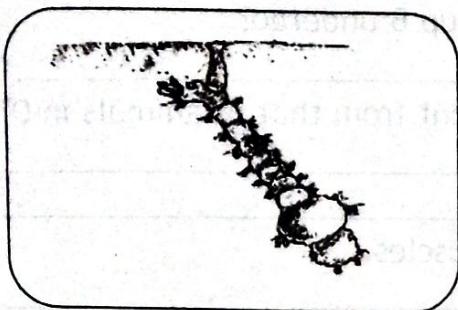
34. Mention any one example of luminous objects.

35. State the use of a crutch to a person with a fractured limb.

36. Give any one substance carried in blood by plasma.

37. Mention any one way we can protect ourselves against bacterial diseases.

The diagram below shows the stage of growth of a mosquito. Use it to answer question 38.



38. Name any one disease spread by a mosquito whose larva is shown above.

39. How is the placenta useful in a womb during pregnancy?

40. In which state of matter is water at 0°C ?

SECTION .B. (60 Marks)

41. (a) What are chemical changes?

(b) Write down any two examples of chemical changes.

(i) _____

(ii) _____

(c) State the biological change that enables organisms to increase in numbers.

42. (a) How do cactus plants reduce the rate of transpiration?

(b) Give any two factors that affect the rate of transpiration.

(i) _____

(ii) _____

(c) In which one way is transpiration useful to plants?

Use the table below and answer question 43.

A	B	C	D
Swans	Toad	Snake	Housefly
Ducks	Frog	Tortoise	Mosquitoes
Chicken	Newts	Lizard	Cockroach

43. (a) To which group of vertebrates are animals in group C?

(b) Give one major difference between animals in group D and those in other groups.

(c) What type of fertilization do animals in group B undergo?

(d) How is the breathing of animals in A different from that of animals in D?

44. (a) Mention any one example of involuntary muscles.

(b) Write down any two functions of muscles in the body.

(i)

(ii)

(c) In which one way can we maintain the proper functioning of the skeletal system?

45. (a) Write down the type of bees responsible for;

(i) feeding the grub _____

(ii) laying eggs _____

(b) Name any one advantage of using modern bee hives.

(c) How is a swarm catcher net useful to bee keepers?

46. (a) How are red blood cells useful in the process of respiration?

(b) How is respiration an important process in the human body?

(c) How is an air sac adapted to gaseous exchange?

(d) Name any one immunisable disease that affects the respiratory system.

47. (a) Apart from babies, mention any two other vulnerable groups of people.

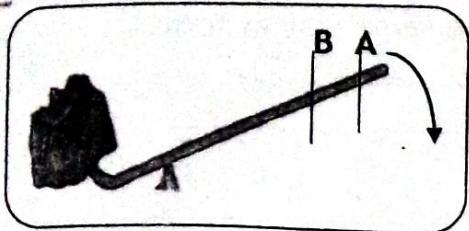
(i)

(ii)

(b) Why are weaning babies fed on soft foods?

(c) At what age do mothers wean their babies?

The diagram below shows a crow bar. Use it to answer question 48.



48. (a) To which class of levers does the above crowbar belong?

(b) What does the arrow on the above crowbar show?

(c) At what point on the above crowbar does the user use less effort?

(d) State the reason for your answer in (c) above.

49. (a) In which way is filtration of water useful in cleaning clothes?

(b) Mention the practice in cleaning clothes that removes excess water from clothes.

(c) Give any two diseases that result from drinking contaminated water.

(i)

(ii)

50. (a) By what process does heat travel through;

(i) water?

(ii) space?

(b) Write down any one effect of heat loss on matter.

(c) How do double silvered walls prevent heat loss in a vacuum flask?

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

(i) Hygrometer?

(ii) Anemometer?

(b) Suggest any two ways how people can manage rainy weather.

(i)

(ii)

52. (a) How are mushrooms and ferns similar in their way of reproduction?

(b) Name any two other plants that reproduce in the same way as ferns.

(i) _____

(ii) _____

(c) How do mushrooms obtain their food?

53. (a) Name any one place where the housefly lays its eggs.

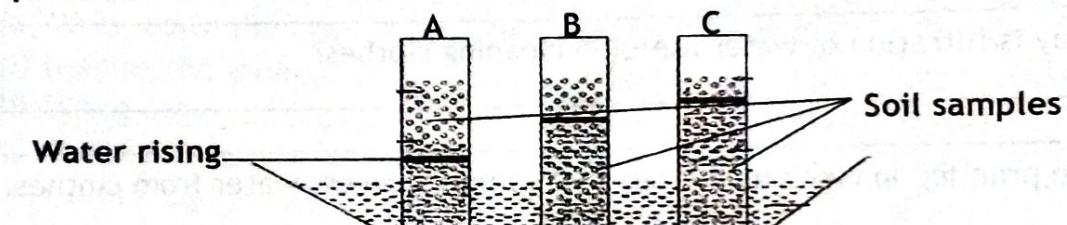
(b) Mention any one disease spread by houseflies that attacks eyes.

(c) Give any two ways of controlling houseflies in our community.

(i) _____

(ii) _____

The experiment below is about a certain soil property. Study and use it to answer question 54.



54. (a) What does the above experiment show?

(b) Name the soil sample marked;

(i) A _____

(ii) B _____

(c) How is soil sample C useful in the environment?

55. (a) Write down any two rotational grazing methods in cattle keeping.

(i) _____

(ii) _____

(b) Give any one advantage of using rotational grazing.

(c) Mention any one tick borne disease among cattle.

END

BROAD EXAMINATIONS GUIDES

P.7 SCIENCE TRIAL SET II TERM II 2023

QN	CORRECT ANSWER(S)	CLASS	RELATED CONTENT
1.	In the abdomen	P.4	- Human body organs; their location and functions
2.	Cassava/sweet potatoes	P.6	- Natural methods of plant propagation - Advantages of vegetative propagation
3.	To prevent environment degradation/soil pollution.	P.6	- Meaning of recycling - 6RS
4.	By removing hiding places for germs that would cause diarrhoeal diseases.	P.4	- Diarrhoeal diseases; signs, effects and control/prevention
5.	Femur	P.7	- Structure of the human skeleton - Parts and functions
6.	For both meat and egg production.	P.5	- Types of chickens - Methods used to rear poultry
7.	They are chisel shaped.	P.4	- Structure of the human tooth - Disorders and parts
8.	Writing staff notations.	P.6	- Methods used to store sound energy - Structure of the human ear
9.	By constructing a hutch with a wire mesh.	P.4	- Types of rabbit hutches - How to prevent rabbit diseases
10.	By providing antibodies to babies.	P.5	- Meaning of immunity - Types of immunity and how they are acquired
11.	It is due to reflection of light from the objects to our eyes.	P.7	- Types of reflection - Laws of reflection
12.	Flowers provide nectar to bees.	P.5	- Materials bees use to make nectar - Products got from bees
13.	It takes more than a year to mature/it is harvested year after year.	P.4	- Meaning of annual and perennial crops - Their examples
14.	By vibration of its string when rubbed using a bow.	P.6	- Groups of musical instruments - How they are played
15.	By ensuring proper feeding/watering of dairy cattle / practicing steaming up.	P.6	- Meaning of steaming up - Advantages of steaming up
16.	Air moves things.	P.3	- Meaning of air - Properties of air and their applications
17.	Scapula (shoulder blade)	P.7	- Types of bones - Types of joints
18.	Movable joint M allows movement in all directions	P.7	- Types of muscles

	while movable joint Y allows movement in only one direction.		functions of muscles
19.	They are likely to suffer from kwashiorkor.	P.4	<ul style="list-style-type: none"> - Classes of food - Their functions in the body
20.	Marabou stork / crow / vulture	P.6	<ul style="list-style-type: none"> - Classes of birds - Adaptations of most birds to flight
21.	By helping schoolchildren to be aware of HIV/AIDS and its dangers.	P.6	<ul style="list-style-type: none"> - PIASCY in full - AIDS in full
22.	It traps flies until they die.	P.6	<ul style="list-style-type: none"> - Characteristics of VIP latrine - Disadvantages
23.	Sugar and salt attract houseflies which bring germs to the wound.	P.6	<ul style="list-style-type: none"> - Difference between a burn and a scald - Their first aid
24.	A single movable pulley requires less effort than a single fixed pulley.	P.7	<ul style="list-style-type: none"> - Calculations on pulleys - Their diagrams
25.	Typhoid.	P.4	<ul style="list-style-type: none"> - Groups of germs - Examples of diseases under each
26.	By wind.	P.6	<ul style="list-style-type: none"> - Meaning of seed dispersal - Advantages of seed dispersal
27.	It has a tuft of hair, it is light, has feathery structure.	P.6	<ul style="list-style-type: none"> - Adaptations of fruits to their modes of dispersal
28.	Light travels faster than sound.	P.7	<ul style="list-style-type: none"> - Characteristics of light - Uses of light energy
29.	Maternal and child health care.	P.5	<ul style="list-style-type: none"> - Meaning of PHC - Elements and principles
30.	Both reproduce by binary fission.	P.5	<ul style="list-style-type: none"> - Types of bacteria - Bacterial diseases
31.	Distillation	P.6	<ul style="list-style-type: none"> - Types of alcohol - Why people drink alcohol
32.	It helps butchers to measure mass of meat.	P.5	<ul style="list-style-type: none"> - Difference between mass and weight - Meaning of density
33.	Caring for children.	P.2	<ul style="list-style-type: none"> - Types of families - Advantages of each type
34.	The sun / stars / glow worm / red hot charcoal / star fish.	P.7	<ul style="list-style-type: none"> - Meaning of luminous objects - Examples of non luminous objects
35.	It helps a person with a fractured limb to walk.	P.4	<ul style="list-style-type: none"> - Diagram of a crutch - Importance of giving first aid
36.	Digested food / drug / hormones / salts / urea.	P.7	<ul style="list-style-type: none"> - Components of circulatory system - Blood components
37.	By immunisation / by observing proper personal hygiene / by observing proper sanitation.	P.5	<ul style="list-style-type: none"> - How bacterial diseases spread - Structures of types of bacteria

38.	Elephantiasis (filariasis)	P.4	<ul style="list-style-type: none"> - Mosquito lifecycles - Diseases spread by mosquitoes
39.	It stores and supplies food nutrients to the foetus from the mother's blood / attaches the embryo onto the walls of the uterus / prevents mother's blood from mixing with that of the foetus.	P.6	<ul style="list-style-type: none"> - Diagram of the foetus in the womb - Reproductive disorders
40.	Solid state.	P.5	<ul style="list-style-type: none"> - States of matter - Changes of states of matter
41.	<ul style="list-style-type: none"> (a) Chemical changes are changes where a new substance is formed. (b) Rusting / fermentation / decomposition / chemical digestion. (c) Reproduction. 	P.5	<ul style="list-style-type: none"> - Effects of changes in the environment - Advantages of chemical changes
42.	<ul style="list-style-type: none"> (a) By developing thorny leaves (By modifying the leaves into spines) (b) Speed of weed / temperature / light intensity / surface area of a leaf humidity. (c) It helps plants to absorb water and minerals salts from the soil. * cools plants 	P.4	<ul style="list-style-type: none"> - Meaning of transpiration - How transpiration is important to the environment
43.	<ul style="list-style-type: none"> (a) Reptiles (b) Animals in group D are invertebrates while animals in other groups are vertebrates. (c) External fertilization. (d) Animals in A breathe through lungs while those in D breathe through spiracles. 	P.6	<ul style="list-style-type: none"> - Classification table - Examples of animals under each class of animals
44.	<ul style="list-style-type: none"> (a) Sphincter muscles / muscles of blood vessels / muscles of reproductive organs / intercostal muscle. (b) Muscles enable the body to move / enable the body to carry heavy materials / muscles of the heart help in pumping blood to all body parts. (c) Through performing regular physical exercises / maintaining good posture / feeding on a balanced diet. 	P.7	<ul style="list-style-type: none"> - What are muscles - Behavior of biceps and triceps
45.	<ul style="list-style-type: none"> (a) (i) worker bees (ii) queen bee (b) There is easy inspection of honey / easy harvesting of honey (c) It is used in bee stocking. 	P.5	<ul style="list-style-type: none"> - Types of bee hives - Methods used to extract honey from honey combs
46.	<ul style="list-style-type: none"> (a) They transport oxygen to all body parts. (b) It helps the body to get energy. 	P.6	<ul style="list-style-type: none"> - Structure of the respiratory organs - What happens to some parts

			during breathing in or out
	(c) It is surrounded by a network of blood capillaries / it is thin walled to allow easy diffusion of gases. (d) COVID - 19 / tuberculosis / whooping cough / Diphtheria.		
47.	(a) Pregnant mothers / the sick / elderly (b) Weaning babies have not yet developed teeth that chew foods. (c) At six months.	P.5	- Meaning of vulnerable people - How to care for them
48.	(a) First class levers. (b) The direction of effort. (c) At point A (d) Point A has a longer effort arm than point B.	P.7	- Meaning of levers - How levers simplify man's work
49.	(a) It helps people to remove impurities from water. (b) Wringing (c) Polio / cholera / typhoid / dysentery	P.6	- Steps taken in washing clothes - Methods used to clean water
50.	(a) (i) by convection (ii) by radiation (b) Contraction / drop in temperature. (c) By radiation	P.	- Meaning of heat energy - Applications of heat transfers
51.	(a) (i) It is used to measure humidity. (ii) It measures the speed of wind. (b) Wearing heavy clothes / keeping indoors / using umbrellas.	P.4	- Meaning of weather - Weather conditions - Elements of weather
52.	(a) Both reproduce by means of spores. (b) Mosses / horse tail / horn worts/ liver worts (c) Saprophytically.	P.5	- Similarities between bacteria and fungi - Uses of fungi
53.	(a) In compost pits / latrines / dustbins (b) Trachoma (c) Spraying adult houseflies / maintaining proper sanitation / maintaining proper food hygiene.	P.3	- Structure of a housefly - Parts and functions
54.	(a) Soil capillarity. (b) (i) A - Sand soil (ii) B - loam soil (c) It is used for pottery / for brick making.	P.5	- Soil erosion - Soil profile - Soil texture
55.	(a) Tethering / strip grazing / paddock system (b) Pasture is evenly used / it prevents cattle pests and diseases / manure is evenly spread in the farm. (c) Heart water / red water / Anaplasmosis / East coast fever.	P.6	- Cattle management and practices - Their importance - Cattle feeds (types)