



THE REPUBLIC OF UGANDA

TAAND EXAMINATIONS BOARD

PRE-PRIMARY LEAVING EXAMINATION, 2024

INTEGRATED SCIENCE (SPECIAL PAPER)

Time Allowed: 2 hours 15 minutes

Random Number						Personal Number		

Candidate's Name:

Candidate's Signature.....

Schools Name

District:

Read the following instructions carefully:

1. This paper is made up of two Sections: A and B.
2. Section A, has 40 short-answer questions (40 marks).
3. Section B has 15 questions (60 marks).
4. Answer ALL questions. All answers to both Sections A and B **MUST** be written in the spaces provided.
5. All answers **MUST** be written using a blue or black ball-point pen or ink. Diagrams should be drawn in pencil.
6. Unnecessary alteration of work may lead to loss of marks.
7. Any handwriting that cannot easily be read may lead to loss of marks.
8. Do not fill anything in the box indicated "For examiners' use only" and those inside the question paper.

FOR EXAMINERS' USE ONLY		
Qn. No.	Marks	Exrs' No.
1 - 10		
11 - 20		
21 - 30		
31 - 40		
41 - 43		
44 - 46		
47 - 49		
50 - 52		
53 - 55		
TOTAL		

SECTION A: (40 Marks)

1. State the gas needed for photosynthesis to take place.

2. In which harmful way is a water snail similar to a housefly?

3. How can you keep your skeletal system in a good working order?

4. Why is petroleum known as a non renewable resource?

The diagram below shows a germinating bean seed. Use it to answer question 5.



5. Name the type of germination shown above.

6. Which part of a mushroom produces and stores spores?

7. How can a family participate in the promotion of Primary Health Care?

8. Give **one** danger of draining wetlands.

9. State the best way of improving local breeds of poultry.

10. Why do bees visit flowers?

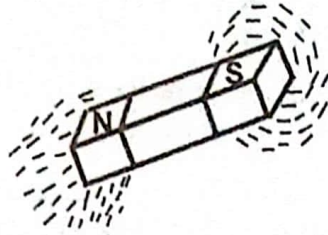
11. In what way is the reproduction of birds similar to that of reptiles?

12. How do people get infected with cholera?

13. Give the difference between the air we breathe in and the air we breathe out.

14. Give **one** way farmers can control inbreeding in goat rearing.

The diagram below shows an experiment carried out by P.7 pupils. Study it and answer question 15.



15. Identify the property of magnets shown in the diagram.

16. Why is zero grazing system of keeping cattle suitable in urban areas?

17. Write any **one** way you can care for cassava crops in the garden.

18. Suggest any **one** way saliva is useful during digestion.

19. A primary four pupil ate unwashed mango in the morning.
Identify any **one** disease he is likely to suffer from.

The diagram below shows a nutcracker. Study it and answer questions 20 and 21.



20. Show with an arrow letter L the position of the load.
21. In which class of levers is a nutcracker?

22. How are airsacs (alveoli) adapted to their function of gaseous exchange?

23. Apart from meat production, why else do people keep goats?

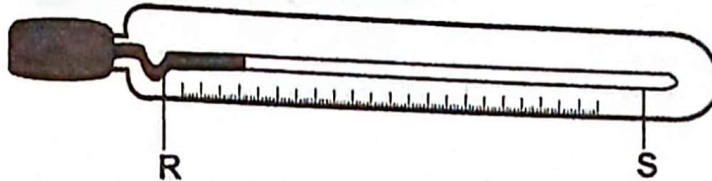
24. The child's health card shows immunization information about a child.
Mention any **one** information recorded on a child's card.

25. Which component of soil improves on its fertility?

26. Name the blood vessel which transports oxygenated blood from the heart to all parts of the body.

27. Of what importance are ventilators on a living house?
28. Identify the force which enables a bicycle to stop when the brakes are applied.
29. You hear the school bell at the end of the lesson, what sense organ do you use to detect the sound of the school bell?

The diagram below shows a clinical thermometer. Use it to answer questions 30 and 31.



30. Name part marked S. ☐
31. State the function of part marked R on the clinical thermometer.
32. How do animals make use of the gas given out by plants during photosynthesis?
33. Which condition requires the use of tepid sponging as a way of giving first aid?
34. Give **one** way of protecting water sources from pollution.
35. What is the danger of using sharp objects to clean ears?
36. Mention any **one** condition that may lead to short circuit at home.
37. Give **one** way in which fungi are useful to human health.
38. What energy change takes place in a dry cell when the circuit is complete?
39. Name the disease of rabbits that can also affect human beings.
40. Which type of energy is possessed by a passenger sitting in a moving car? ☐

SECTION B: (60 Marks)

41. (a) To which group of birds does an ostrich belong?

(b) Apart from a vulture, give **two** other examples of scavenger birds
(i) _____
(ii) _____
(c) How are hollow bones an important feature to most birds?

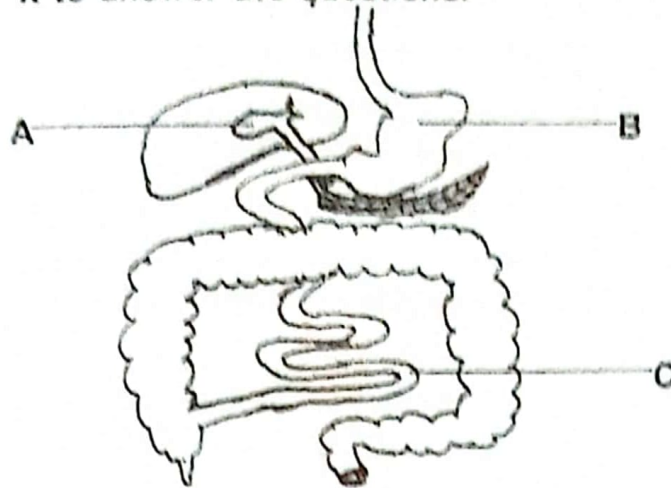
42. (a) What is transplanting?

(b) Identify any **two** activities done to care for seedlings in the nursery bed.
(i) _____
(ii) _____
(c) How are perennial crops different from annual crops?

43. (a) Give any **two** ways how banana fibre is resourceful to people
(i) _____
(ii) _____
(b) Besides banana fibre, mention **two** other examples of plant fibres
(i) _____
(ii) _____
44. (a) State **two** types of chicken kept at home.
(i) _____
(ii) _____
(b) Give **two** disadvantages of free range system in poultry keeping
(i) _____
(ii) _____
45. (a) What is an echo?

(b) State **two** uses of echoes to people.
(i) _____
(ii) _____
(c) Mention **one** way of reducing echoes in cinema halls

The diagram below is of a body system. Study it and use it to answer the questions.



- (a) Name the body system shown in the diagram above.

- (b) State the importance of the digestive juice secreted by A.

- (c) How is part C adapted to its function of food absorption?

- (d) Identify any **one** disease that can affect the body system above. ☐

47. (a) ✱ What are inorganic fertilizers?

(b) Mention **two** disadvantages of using inorganic fertilizers.

(i) _____

(ii) _____

(c) Write **one** example of an organic fertilizer.

48. (a) Apart from cockroaches, state **two** examples of insects that undergo incomplete metamorphosis.

(i) _____

(ii) _____

(b) Why are people encouraged to sleep under insecticide treated mosquito nets?

(c) Give **one** way of controlling cockroaches at home.

49

Match the parts of the human skin in list A with their functions in list B correctly.

List A

List B

- | | |
|-----------------------|---|
| (i) Sebaceous glands | Determines the skin colour. |
| (ii) Blood vessels | Keeps the skin water proof. |
| (iii) Nerve endings | Supplies food and removes excretory products. |
| (iv) Malpighian layer | Enables the skin to feel. |

- (i) Sebaceous glands _____
- (ii) Blood vessels _____
- (iii) Nerve endings _____
- (iv) Malpighian layer _____



50. (a) Define the term first aid.

(b) Identify the accident whose first aid is the giving a "Kiss of life".

(c) Write **two** causes of accidents at home.

(i) _____

(ii) _____

51. (a) Give the meaning of the term volume.

(b) If an object is 270g and has a volume of 30cc. Calculate its density.
(3marks)

52. (a) What is adolescence?

(b) State **two** secondary sex characteristics in females.

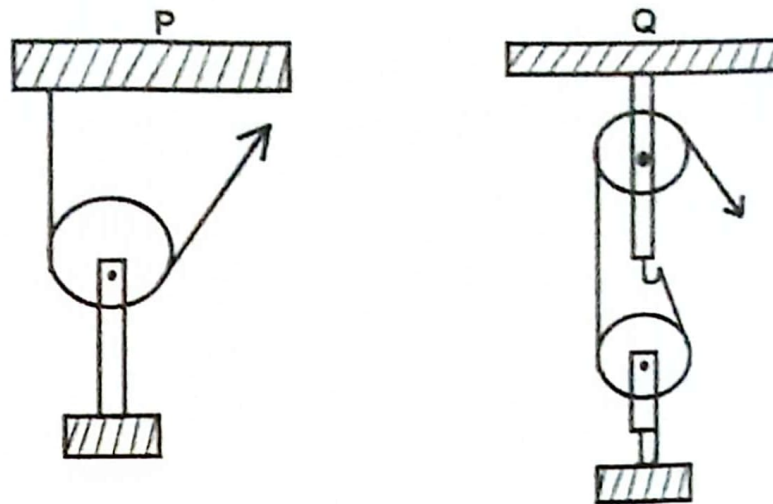
(i) _____

(ii) _____

(c) Write **one** danger of teenage pregnancy.



The diagram below shows simple machines. Use them to answer question 53.



- (a) Name machines marked:
- (i) **P** _____
- (ii) **Q** _____
- (b) Which of the two machines is likely to take less effort when in use?
- _____
- (c) Mention **one** machine that belongs to wheel and axle.
- _____
54. (a) What are vulnerable people?
- _____
- _____
- (b) Give **two** examples of vulnerable people.
- (i) _____
- (ii) _____
- (c) Apart from building their bodies and growth, why are vulnerable people given food rich in proteins?
- _____
55. (a) How is a sprain different from a strain?
- _____
- _____
- (b) State the part of a joint that prevents the wear and tear.
- _____
- (c) Write **two** uses of a skeleton in the body.
- (i) _____
- (ii) _____

END

TAAND P.7 SCIENCE PRE-P.L.E SPECIAL PAPER M.GUIDE, 2024.

SECTION A

1. Carbon dioxide. 2. Both spread diseases.
3. By doing physical exercises regularly / By keeping the body in the right posture / feeding on a balanced diet. 4. It is not replaced naturally.
5. epigeal germination. 6. gills.
7. By feeding on a balanced diet / Collecting and buying rubbish / Proper disposal of rubbish / Boiling water for drinking / Encouraging immunization of family members / Clearing breeding places for vectors near the home / Sharing information on health / Practising good hygiene / Sweeping and mopping houses / etc.
8. It leads to environmental degradation / global warming / reduced rainfall / flooding in case it rains.
9. By cross breeding them. 10. To collect nectar.
11. Both reproduce by laying eggs / Both undergo internal fertilization.
12. When they eat contaminated food with cholera germs.
13. The air we breathe in is oxygen while the air we breathe out is carbon dioxide.
14. By castrating male goats of closely related animals.
15. Magnetism is concentrated in the ends / The attraction of a magnet is greater in its ends (poles).
16. It is because land in urban areas is limited / little.
17. By weeding / manuring / by protecting them against pests and diseases.
18. It lubricates food. 19. diarrhoea / intestinal worms.



21. second class levers.
22. They provide a large surface area for the exchange of oxygen and carbon dioxide / They are surrounded by blood capillaries.
23. For milk production / mohair production / income.
24. Child's age / name / date of birth / parents' names / weight / Birth order / vaccines received and date / immunization schedule / sex of the child / parents' occupation. 25. humus. 26. aorta.
27. They let out warm used air.
28. friction. 29. ear. 30. bore.
31. prevents the back flow of mercury.
32. They use it for respiration. 33. fever.
34. Avoid dumping wastes near water sources.
35. They may damage the eardrum.
36. Overloading / poor wiring.
37. Some fungi are eaten as food / Some are used as medicine / Some are source of income.
38. Chemical energy changes to electric energy.
39. Pneumonia / colds. 40. Potential energy.

SECTION B

- 41.(a) flightless birds. (b) crow / marabou storks.
- (b) Boredom / Lack of enough feeds / over crowding.
- (c) They enable them to fly.
- 42.(a) Transplanting is the transfer of seedlings from the nursery bed to the main garden.
- (b) weeding / manuring / watering / spraying with pesticides / providing shed to the seedlings / fencing.
- (c) Perennial crops are crops which take a period of more than a year to mature while annual crops are crops which mature in a period of less than a year.
- 43.(a) It is used for making balls / mats / thatching temporary houses / making ropes / for mulching.
- (b) raffia / jute / sisal.
- 44.(a) broilers / layers / dual purpose.
- (b) birds feed on a balanced diet / birds do enough exercises / The farmer has time to do other work / Birds look for food on their own / It is cheap.

- 45.(a) An echo is a reflected or bounced sound.
 - (b) Echoes are used by sailors to determine the depth of the sea / Pilots use echo soundings from hills and mountains to avoid accidents.
 - (c) By covering cinema halls with soft materials.
 - 46.(a) digestive system. (b) It emulsifies fats.
 - (c) It has villi
 - (d) Diarrhoea / dysentery / cholera / appendicitis / Peptic ulcers / Typhoid.
 - 47.(a) Inorganic fertilizers are fertilizers which are manufactured in factories with specific mineral salts.
 - (b) They are expensive to buy / They require skilled labour to apply / They make the soil acidic / They stay in the soil for a shorter period / They kill some useful soil living organisms / They are poisonous to people and animals / They pollute water sources / They are easily leached by rain water / They spoil crops if used wrongly / Their excessive use spoils soil / They destroy soil texture and structure.
 - (c) Farmyard manure / compost manure / green manure / organic mulches.
 - 48.(a) grasshoppers / crickets / locusts / fleas / bedbugs / lice / preying mantis.
 - (b) To protect themselves from malaria
 - (c) By spraying them with insecticides / By covering food.
 - 49.(i) Sebaceous glands - keep the skin water proof.
 - (ii) Blood vessels - supply food and remove excretory products.
 - (iii) Nerve endings - enable the skin to feel.
 - (iv) Malpighian layer - determines the skin colour.
 - 50.(a) First aid is the first help given to a casualty before being taken to health worker / hospital.
 - (b) near drowning.
 - (c) carelessness / running / rushing.
 - 51.(a) Volume is the amount of space an object occupies.
 - (b) Density = $\frac{\text{Mass}}{\text{Volume}}$
- $$D = \frac{M}{V}$$
- $$D = \frac{270}{30} = 9\text{g/cc}$$
- 52.(a) Adolescence is a transitional stage between childhood and adulthood.
 - (b) Growth of hair under the arm pits / sweat glands become more active / hair around the vagina (pubic hair) / enlargement and rounding of hips / development of hips.
 - (c) The body is not ready for pregnancy / leads to suffering / leads to school drop out.
 - 53.(a)(i) P - Single movable pulley.
 - (ii) Q - The block and tackle / Fixed movable pulley.
 - (b) Machine Q.
 - (c) egg beater / door knob / car steering wheel / windlass / handles of a bicycle.
 - 54.(a) Vulnerable people are people who need special care.
 - (b) Babies / The sick / the disabled / pregnant women / breastfeeding mothers / orphans / weaning children / the elderly.
 - (c) For repairing worn out body tissues.
 - 55.(a) A sprain is an injury on a ligament while a strain is an injury on a muscle.
 - (b) cartilage.
 - (c) It supports the body / gives the body shape / allows body movement / protects delicate body parts.

****END****