

BLUE PRINT SET EIGHT
PRIMARY SEVEN
INTEGRATED SCIENCE

Time allowed: 2 hours 15 minutes

Index No.

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Candidate's Name: _____

Candidate's Signature: _____

School Name: _____

Read the following instructions carefully:

1. The paper has **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. 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 crossing of work may lead to loss of marks.
7. Any handwriting that cannot be easily read may lead to loss of marks.
8. Do **not** fill anything in the boxes indicated;
For Examiner's use only.

FOR EXAMINER'S USE ONLY

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Qn. No	MARK	SIGN
1 – 10		
11 – 20		
21 – 30		
31 – 40		
41 – 43		
44 – 46		
47 – 49		
50 – 52		
53 – 55		
TOTAL		

Turn over

SECTION A: 40 MARKS
(Questions 1 to 40 carry one mark each)

1. What does an insect use to breath in and out?

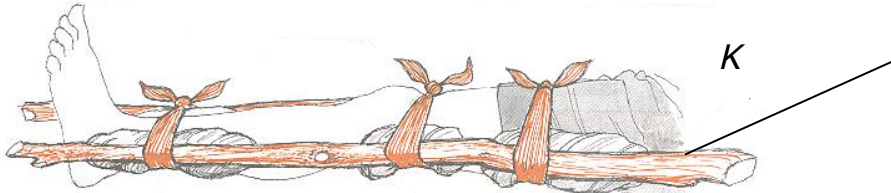
2. In which part of a sweet potato plant is food for the plant stored?

3. State one advantage of brushing teeth regularly.

4. What is the use of a wheelbarrow at school?

5. Name the type of lens used to correct short sightedness.

The diagram below shows the leg of an injured person. Use it to answer question 6.



6. How useful is the structure marked **K** to the injured person?

7. Apart from beans, give one other example of a crop that is a legume.

8. Name any one bird that does not fly.

9. Give one reason why people keep rabbits.

10. Why does a tomato grower first plant tomato seeds in a nursery bed?

11. Apart from smoking, give any one way meat can be prevented from smelling bad.

12. Why is it important for sexually active people to have their blood tested for HIV?

13. Why do some cattle keepers divide up their grazing land into paddocks?

14. State one way of preventing germs from hiding in our fingers.

15. State one use of forests to monkeys.

The diagram below shows a method of planting millet grains. Study it carefully and answer question 16.

16. What is the method of sowing seeds shown in the diagram above?

17. Name the sense organ that is affected by Tuberculosis.

18. Apart from proteins, name one other class of food that we get from eating fish.

19. In which way are bacteria important in the formation of soil?

20. State any one method used to separate alcohol that is mixed with water.

21. How can the pitch of a string of a musical instrument be changed?

The diagram below is of a head of a bird. Use it to answer question 22.



22. What does a bird with this type of beak eat?

23. Give one problem we can avoid by smoking latrines.

24. Why do flies lay their eggs on faeces and rotting bodies?

25. Give any one advantage of cooking on a clay-made charcoal stove.

26. Mention the function of a uterus in the human body.

27. Why are infant children (babies) easily attacked by diseases?

28. What is a strain?

29. State any one use of carbon dioxide in industries.

The diagram below is of a common animal. Use it to answer question 30.



30. Which disease does this animal spread to humans?

31. Why is it a good idea to immerse the burnt body part of a person in cold water as a way of giving first aid?

32. What name is given to the structure at home where dried seeds are kept for a long time?

33. Which component of blood fights germs in the body?

34. Name any one disease that is caused by plasmodium.

35. Where in the digestive system of man are proteins digested?

36. Give one reason why farmers should not kill earthworms.

37. Give one reason for including calcium in the feeds given to layers on a poultry farm.

38. In the space below, draw a simple diagram of a tap root system.

39. Name the machine used to castrate animals on a farm.

40. Give one reason why oxygen is matter.

SECTION B

(Questions in this section carry four marks each)

41(a) Give any two examples of natural changes that happen in the sky.

(i)

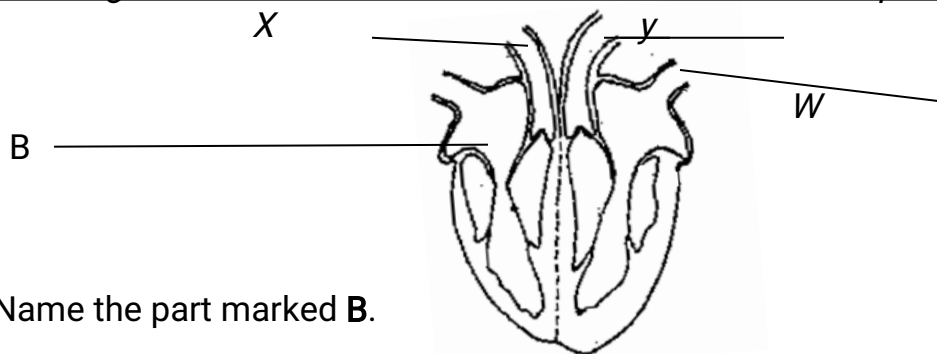
(ii)

(b) Mention one characteristic of each type of change below.

(i) physical change

(ii) chemical change

The diagram below is of a human heart. Use it to answer question 42.



42a) Name the part marked **B**.

(b) How is the blood in vessel **Y** different from the blood in vessel **X**?

(c) Name the blood vessel marked **W**.

(d) Mention one disorder of the organ shown above.

43a) State the importance of bees in a garden of beans.

(b) Give one reason why bees are common in a garden of beans at the flowering stage.

(c) Suggest any two reasons why a bean plant may fail to bear seeds.

(i)

(ii)

44a) Give any two disadvantages of keeping goats on free range system.

(i)

(ii)

(b) Give the main reason why people keep each goat below.

(i) Saanen;

(ii) Somali goat

The list below shows animals. Study it and answer question 45.

A	-	TILAPIA
B	-	FROG
C	-	ADDER
D	-	CROCODILE

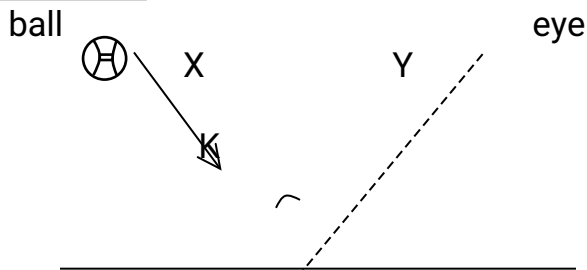
45(a) Apart from laying eggs, give one similarity between animal **A** and **B** in the way they reproduce.

(b) Which of the animals above moves by slithering?

(c) To which group of vertebrates does animal **D** belong?

(c) Name the common habitat for animals **A**, **B** and **D**.

The diagram below shows light reflected by a mirror. Study and use it to answer question 46.



46(a) Name the rays **X** and **Y**

(ii) Y _____

(b) Name the angle marked K.

(c) State how the image of the ball reaches the eye.

47a) Give one reason why water is important in a human body.

(b) Give any two reasons why people in a home should not drink rain water before boiling it.

(i) _____

(ii) _____

(c) Name the mineral salt that is common in water drawn from rivers and wells.

48. The table below shows elements of weather, weather conditions and the instruments used. Complete it correctly.

Element		Condition	Instrument
(i)	rain	rainy	
(ii)		high/low	barometer
(iii)	temperature		Six's thermometer
(iv)	wind	windy	

49(a) Name the body system to which the lungs belong.

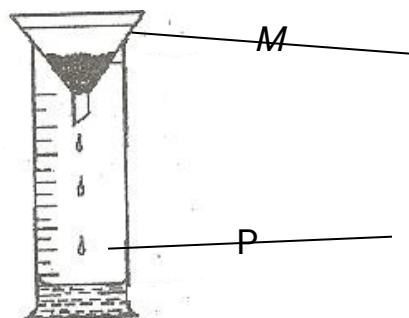
(b) Mention any two products we breathe out during respiration.

(i) _____

(ii) _____

(c) Give one reason why we should not breathe in through the mouth.

The diagram below shows one of the methods of separating mixtures. Study and use it to answer question 50.



50(a) Name the method shown above.

(b) _____
Give one reason why the above method was used.

(c) _____
Name the part marked **M**.

(d) _____
Name the liquid marked **P**.

51(a) Apart from weaning babies, give two other examples of vulnerable groups.

(i) _____

(ii) _____

(b) What is bottle feeding as used in human nutrition ?

(c) _____
State any one advantage of breastfeeding to the baby.

The diagram below shows a simple machine. Use it to answer question 52.

52(a) Name the machine shown above.

(b) _____
State two uses of the above machine in a workshop.

(i) _____

(ii) _____

(c) Give one reason why the above machine is grouped under first class lever.

53(a) What is soil erosion?

(b) _____
Name the type of soil erosion common in;

(i) flat land _____

(ii) slopping land _____

(c) Why is there more soil erosion in hilly (slopy) areas?

54a) Give two examples of fungi.

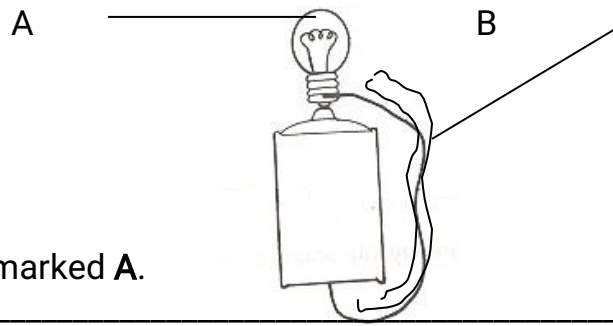
(i) _____

(ii) _____

(b) How do fungi feed?

(c) Why are fungi unable to make their own food?

Study the diagram of a simple electric circuit below and use it to answer question 55.



55a) Name the part marked **A**.

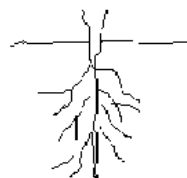
(b) What material is part **B** made of?

(c) Give one reason why the material named in (b) above was used.

(d) Give any one reason that may lead to failure to produce light in the above simple circuit.

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1. Spiracles
2. In the roots
3. It helps to avoid tooth decay/It keeps the teeth white/it prevents mouth odour
4. It is used to carry heavy loads like posho, beans, building materials etc
5. Concave lens
6. Structure is used to hold the leg in position
7. Cow peas/ground nuts
8. Kiwi/Ostrich
9. For sale/For their fur/For meat
10. In order to allow seedlings mature enough to resist the weather in the main garden
11. Salting/boiling, cooking/Freezing (refrigerating)
12. So that they can know their HIV status and therefore find ways of caring for their lives (health)
13. To have controlled grazing/To control spread of diseases/To prevent animals from destroying crops.
14. Cutting our finger nails short/By regularly washing hands with soap
15. Forests provide food to monkeys (source of leaves and fruits eaten by monkeys)/Forests are habitats for monkeys
16. Broadcasting method
17. The skin
18. Vitamins
19. Bacteria help in decomposition of animal and plants which add humus to the soil
20. Distillation/gently heating a container of the mixture placed in water to allow alcohol evaporate first
21. Feathers trap warmth from the bird's body and prevent it from escaping
22. insects/worms
23. Bad smell/Flies coming from the latrine
24. So that the larva can get food to enable them grow
25. A clay-made charcoal stove uses less charcoal to cook food/A clay-made charcoal stove keeps heat for much longer time
26. To house/keep the foetus until the time it is produced
27.because they have low immunity to fight off disease germs/they can't take care of themselves properly
28. An injury that results from tearing of muscles
29. It is used in making fire extinguishers/It is used in preserving foods (tinned food) and drinks
30. Rabies
31. To reduce pain
32. Granary/barn
33. The white blood cells
34. Malaria
35. In the stomach
36. They make holes in the soil which improves on soil erosion/They make water movement in the soil easy/They die and add humus to the soil
37. So that layers can lay eggs with hard shells/for the strong bones of layers
- 38.



39.

40. Oxygen occupies space/Oxygen has weight

41. –

(a) Formation of rain/rising and setting of the sun/weather changes/movement of clouds/ Changes in shape of the moon

(b) (i) A change can be reversed to obtain the original substance

(ii) It is a change where the state of original substance cannot be obtained/It is irreversible

42. –

(a) Valve

(b) Blood in vessel Y is oxygenated while blood in vessel X is de-oxygenated.

(c) Pulmonary vein

(d) Heart failure/High blood pressure/Low Blood Pressure/Hypertension

43. –

(a) Bees in a garden of beans help in pollination of bean plants

(b) Bees are common because they go there to collect nectar

(c) When a bean plant does not undergo pollination/Due to unfavourable weather conditions/Due to diseases

44. –

(a) Goats can easily eat planted crops/Goats under free range system are easily attacked by predators/Conflicts with neighbours are common/Goats can easily contract diseases since they move anywhere/They can be stolen/They can

disappear

(b) (i) For milk production

(ii) For meat production

45. –

(a) Both animal A and B undergo external fertilization.

(b) Animal C – The adder

(c) Animal D belongs to reptiles

(d) Water

46. –

(a) X – Incident ray/Ray of incidence

Y – Reflected ray/Ray of reflection

(b) Angle of incidence

(c) The image of the ball hits on a plane mirror and is reflected toward the eye

47. –

(a) It helps in digestion/It is useful in detoxifying the body/It enables the skin to be moist and healthy/Water helps to keep the kidneys functioning properly

(b) Rain water is contaminated by dust particles from the atmosphere/Rainwater could be contaminated by objects, materials on roofs and containers where it is collected.

(c) Calcium

48. –

(a) Rain gauge

(b) Air pressure

(c) High/low/hot/cold/cool

(d) Anemometer/wind vane

49. –

(a) The respiratory system

(b) Carbon-dioxide/water vapour

(c)because in the month there are cilia and mucus to trap dust and small objects that can be inhaled (To avoid inhaling such materials and objects)

50. –

(a) Filtration

(b)because sand particles do not dissolve in water so water is filtered in order to remove sand particles

(c) Funnel – filter funnel

(d) Water (filtrate)

51. –

(a) The sick/convalescents/pregnant mothers and their unborn children/The elderly/breast feeding mothers

(b) The feeding of a baby on milk prepared in a special bottle in the place of mother's breast/The practice where a baby is made to feed from a bottle instead of mother's breasts/Feeding a baby with artificial milk from the bottle

(c) Breast milk is a complete diet (balanced diet)/Breast milk has capacity to improve baby's immunity/Breast feeding increases the bond between mother and baby/Baby gets milk at the right body temperature/The baby doesn't find problems with digestion of breast milk since it is easily digestible.

52. –

(a) A hammer

(b) To drill/drive nails into pieces of wood/To draw nails out of wood/To flatten bent surfaces of metals

53. –

(a) The movement of soil particles from one place to another by erosional agents.

(b) (i) sheet erosion

(ii) gully erosion/Rill erosion

(c) ...because on slopes water runs with a great force therefore carrying more particles

54. –

(a) Mushroom/toadstools/puffballs

(b) By absorbing decaying matter

(c)because they lack chlorophyll

55. –

(a) Filament

(b) Rubber/plastic

(c)because it is a bad conductor of electricity.

(d) If the bulb is faulty/If the bulb is loosely connected to the positive terminal/If the dry cell was completely exhausted