

# SEETA-EXAMINATIONS COMMITTEE

## SPECIAL SET FOUR 2022

### Integrated Science

**Time allowed: 2 hours and 15 minutes**

INDEX NUMBER

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**NAME:** \_\_\_\_\_

Signature: \_\_\_\_\_

Stream \_\_\_\_\_

Emis No \_\_\_\_\_

#### EXAMINER'S USE ONLY

A	
B	
TOTAL	

#### Read the following instructions carefully:

1. The paper is made up of section A and B.
2. Section A has 40 short answer questions (40 marks).
3. Section B has 15 questions (60 answers).
4. Answer ALL questions. All answers to both section A and B must be written in the spaces provided.
5. All answers must be written in blue ink.
6. Any handwriting that cannot easily be read will lead to loss of marks.
7. Unnecessary alteration of work may lead to loss of marks.
8. Do not write anything in the box indicated for examiner's use only.

PARENT'S COMMENT	SIGNATURE

**SECTION A (40 marks):**

1. Mention the class of food that is necessary for steaming up a pregnant cows.  

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2. Give one way man has used the process of condensation.  

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3. Point out one substance needed by plants during photosynthesis and germination.  

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**The farming practice below shows one of the care given to seedlings after transplanting.**



4. Why does a farmer provide shelter to the seedling after transplanting?  

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5. How is the movement of the larva stage of a mosquito different from that of the adult mosquito?  

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6. Which method of obtaining wood for timber involves cutting a tree at an angle to a stump level?  

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7. Name one of the long bones found below the knee.  

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8. Point out one activity that can be done during community clean up campaign.  

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9. Why doesn't wood burn to ash during the making of charcoal?  

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10. Which system of poultry keeping keeps eggs away from layers?  

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11. How is reproduction of a moss plant different from that of a maize plant?  

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12. Which substance is suitable for sterilizing a clinical thermometer?  

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13. Why should one wash hands before preparing sugar salt solution?  

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14. What term is used to describe the upward movement of water through soil?  

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15. How do double silvered walls in a thermos flask prevent heat loss?  

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16. Why are farmers encouraged to harvest rain water?  

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17. How is the awareness of communicable diseases important in our community?  

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18. To which group of succulent fruits do tomatoes belong?  

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19. Apart from drying clothes, why should clothes be hanged on a line in the sunshine on a hot day?  

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20. How is propagation of bananas similar to that of pineapples?  

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21. Which method of making water safe for drinking commonly used by national water and sewerage cooperation?

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22. Which vector spreads the filarial worm that cause river blindness?

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23. State the importance screening blood before transfusion.

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24. Point out one method of controlling weeds in a garden.

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25. What do ticks feed on?

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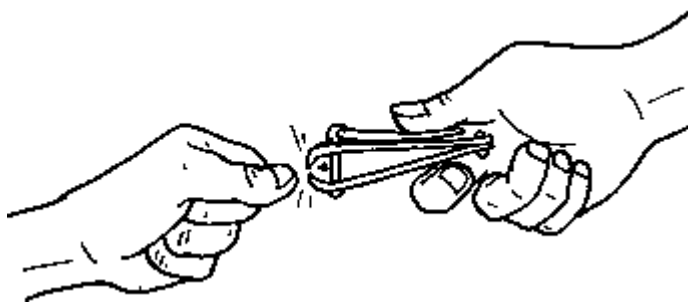
26. State the role of ligaments in a human skeleton.

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27. Which disease makes rabbits have wounds in the ears?

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**The diagram below shows the health habit above by people in the community.**



28. How does the health habit above prevent the spread of diarrhoeal diseases?

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29. Why can't tilapia survive long on land?

---

30. Besides absorption of digested food, what other process takes place in the ileum?

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31. Why are lactating cows fed on dairy meal?  
\_\_\_\_\_
32. Give one similarity between sound and light energy?  
\_\_\_\_\_
33. Point out one way of keeping the respiratory system in the good health condition.  
\_\_\_\_\_
34. Why is the wall of the left ventricle thicker than that of the right ventricle?  
\_\_\_\_\_
35. Why should girls who have started experiencing menstruation cycles abstain from sex?  
\_\_\_\_\_
36. Apart from determining the colour of the skin, how else is melanin important to the body?  
\_\_\_\_\_
37. Convert 65°C to °F.  
\_\_\_\_\_
38. Name the device that protects appliances from the effects of too much current flow.  
\_\_\_\_\_
39. Why is salt added to food during cooking?  
\_\_\_\_\_
40. Which immunisable disease makes limbs of infants very thin and paralyzed?  
\_\_\_\_\_

**Section B (60 marks)**

41. **Study the diagram below and answer the questions that follow.**



(a) To which group of vertebrates does the animal above belong?

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(b) Name **Y**.

---

(c) Give the function of the parts below.

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

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

42(a) What is food preservation?

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(b) Point out one traditional method of preserving meat in your homes.

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(c) How is the preservation of millet similar to that of cassava?

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(d) Name the fungus that commonly grows on food items that are not properly dried.

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43. Give the meaning of the following terms:

(i) condensation

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(ii) Evaporation

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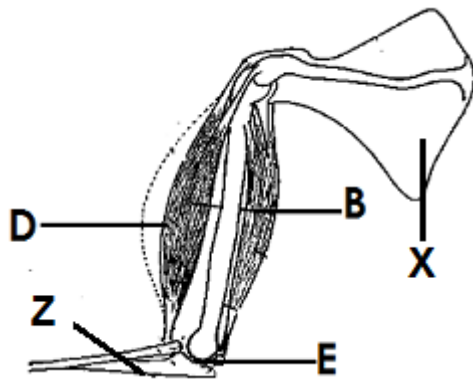
(iii) Melting

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(iv) Convection

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44. **The diagram below shows a human arm.**



(a) Name the type of bone::

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

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

(b) Which of the labeled muscles contracts to lift a load?

\_\_\_\_\_

(c) What type of movable joint is E?

\_\_\_\_\_

45(a) How do fish reproduce?

\_\_\_\_\_

(b) In which two ways do fish help to improve health of people in the community?

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

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

(c) Point out one other group of vertebrates whose eggs are fertilized like those of fish.

\_\_\_\_\_

46(a) Name one viral disease among the six childhood immunisable diseases.

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(b) How is such a disease in 46(a) above spread?

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(c) Point out one way of controlling the diseases mentioned in 46(a) above.

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(d) How are ventilators important in a living house?

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47(a) What is incubation?

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(b) Give one advantage of artificial incubation in poultry management.

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(c) Of what importance is litter in the poultry house?

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(d) Mention one factor that may make a fertilized egg fail to hatch.

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48(a) In which type of digestion is food broken down by enzymes?

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(b) Of what importance are teeth in our mouth during digestion?

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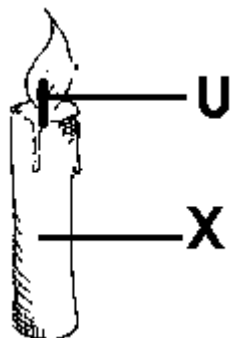
(c) Why doesn't digestion of carbohydrates take place in the stomach?

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(d) Point out one disorder of the digestive system.

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49. **The diagram below is of a burning candle.**



- (a) Name the type of change that occurs in parts marked U and X.
- (i) U \_\_\_\_\_
- (ii) X \_\_\_\_\_
- (b) Give one characteristic of the type of change marked X above.
- \_\_\_\_\_
- (c) Give one change in the environment caused by human activities.
- \_\_\_\_\_

50. **Match the items in list A with those in B.**

<b>A</b>	<b>B</b>
lungs	urine
kidney	bile pigment
liver	sweat
skin	carbon dioxide

- (a) lungs \_\_\_\_\_
- (b) kidney \_\_\_\_\_
- (c) liver \_\_\_\_\_
- (d) skin \_\_\_\_\_

51. Give one reason why the following practices are done on an animal farm:

- (a) steaming up
- \_\_\_\_\_
- \_\_\_\_\_
- (b) shearing
- \_\_\_\_\_
- \_\_\_\_\_
- (c) docking
- \_\_\_\_\_
- \_\_\_\_\_

(d) Dipping cattle

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52(a) Who is an adolescent?

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(b) Point out one primary sex characteristic that occurs in adolescent girls.

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(c) Give two secondary sexual characteristics that occur in both female and male adolescents.

(i)

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(ii)

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53(a) What causes AIDS?

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(b) How is AIDS commonly spread among adults?

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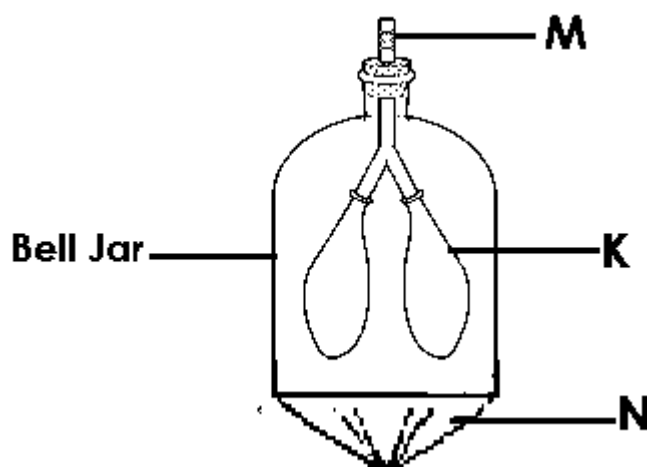
(c) State one common sign to both AIDS and measles patients.

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(d) Point out one way a P.7 child can prevent himself or herself from getting AIDS.

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54. **The diagram below shows on of the body system.**



(a) Name the body system represented by the diagram above.

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(b) What does part marked M represent?

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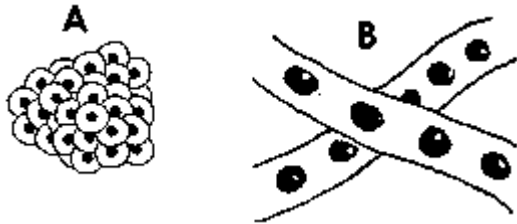
(c) What would happen to part marked K if N is pushed upwards?

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(d) Point out one habit which is destructive to the body system above.

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55. **The diagram below are of spawns of the amphibians.**



(a) Which amphibian lays eggs marked A?

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(b) Give two importance of the jelly on the eggs marked B.

(i)

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(ii)

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(c) How is breathing of a tad pole different from that of its adult?

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