

TOPICAL TEST EXAMINATIONS, 2021
INTEGRATED SCIENCE
THE RESPIRATORY SYSTEM
PRIMARY SEVEN

Time Allowed: 2 Hours 15 Minutes

Index No:

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Candidate's Name:

Candidate's Signature:

School Name:

District Name:

Read the following instructions carefully:

1. The 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. All answers to both sections **A** and **B** must be written in the space provided.

5. All answers must be written using 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 illegible handwriting may lead to loss of marks.

8. **Do not** fill any thing in the boxes indicated for Examiner's use only.

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

1. What is respiration?

.....

.....

.....

2. Mention any two types of respiration

i)

ii)

3. State the two raw materials for respiration.

i)

ii)

4. Write two by-products of respiration.

i)

ii)

5. State the product of respiration.

.....

6. Give two ways respiration is important in the body.

i)

ii)

7. How do plants benefit from respiration?

.....

8. Give any one advantage of breathing through the nose.

.....

.....

9. Why is it not advisable to breathe through the mouth?

.....

.....

10. Which part of the skeleton protects the lungs and heart?

.....

11. How is the epiglottis useful in the body?

.....

.....

12. How is the trachea adapted to its function of gaseous exchange?

.....

.....

13. Why is the trachea made up of rings of cartilage?

.....

.....

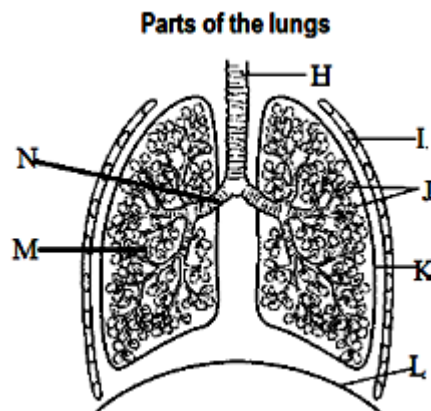
14. How are cilia useful during breathing?

.....

15. Name the part of the lungs where exchange of gaseous takes place?

.....

16. The diagram below shows part of the respiratory system. Use it to answer questions that follow.



a) Name the parts labelled with letters in the above diagram

i. H.....

ii. I.....

iii. J.....

iv. K.....

v. L.....

vi. M.....

vii. N.....

b) State the functions of the parts marked with letters J, K and L.

i. J.....

ii. K.....

iii. L.....

17. Define the term breathing

.....

.....

18. Name the two types of breathing.

i)

ii)

19. State any one difference between the types of breathing you have named (18) above.

.....

.....

.....

20. Give a reason why people breathe in air.

.....

21. How is oxygen useful in the body?

.....

22. What happens to the following parts of the respiratory system during breathing in?

i. The diaphragm

.....

ii. The lungs

.....

iii. The ribs

.....

iv. The chest

.....

23. Why do the diaphragm contract and the ribs move upwards and outwards during breathing in?

.....

.....

.....

24. State a reason why people breathe out

.....

.....

25. Name any one component of the air we breathe out.

.....

26. How are air sacs adapted to their function of gaseous exchange?

.....

.....

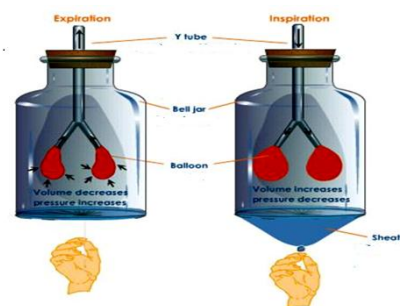
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b) Name the parts of the above named system represented by the following

27. The table below shows the composition of inhaled and exhaled air. Fill in the gaps.

Component of air	Percentage inhaled	Percentage exhaled
Oxygen	i).....	16%
ii).....	0.003%	4%
Nitrogen	78%	iii).....
iv).....	v).....	0.97%
Water vapour	Less	vi).....

28. The diagram below shows an experiment carried out to represent one of the body systems. Use it to answer the questions that follow.



a) Which body system does the diagram represent?

.....

- i. Pipe.....
- ii. Straws.....
- iii. Balloons.....

c) What will happen to the balloon when air is blown through the pipe?

.....
.....

d) What will happen to the rubber sheet when air is blown into the balloon?

.....
.....

29. Where in the body does respiration takes place?

.....

30. Name the structures in the nose which help to filter air.

.....

31. How is the cause of tuberculosis different from that of lung cancer?

32. Name one organ of respiration.

.....

33. Mention any two disorders of the respiratory system.

i)

ii)

34. Which muscle separates the chest cavity from the abdomen?

- iv. rubber sheet.....
- v. plastic bottle/bell jar.....

35. State any two things that happen to air when it reaches the nose

i)

ii)

36. Name any one viral disease that affects the lungs.

.....

37. In which body organ is oxygen absorbed in blood?

.....

38. State any two childhood immunisable diseases that affect the respiratory system.

i)

ii)

39. Name two diseases of the respiratory system caused by smoking.

i)

ii)

40. Give any two ways of keeping the respiratory system in good working conditions

i)

ii)

