



# THE SPECTRUM EXAMINATIONS HUB

## TEACHERS' INTERVIEW

**SUBJECT: INTEGRATED SCIENCE**

**SECTION: UPPER PRIMARY**

*Time: 2 hours*

**DATE** \_\_\_\_\_

**TEACHER'S CODE** \_\_\_\_\_ **TEL.** \_\_\_\_\_

### **FOR EXAMINER'S USE ONLY**

SECTION	SCORE	HEAD OF DEPT'S COMMENT
<b>A</b>		
<b>B</b>		
<b>TOTAL</b>		

### **Read the following instructions carefully:**

1. This paper is made up of sections, **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.

**The Spectrum Examinations 0775680201/0704287274**

## **SECTION A**

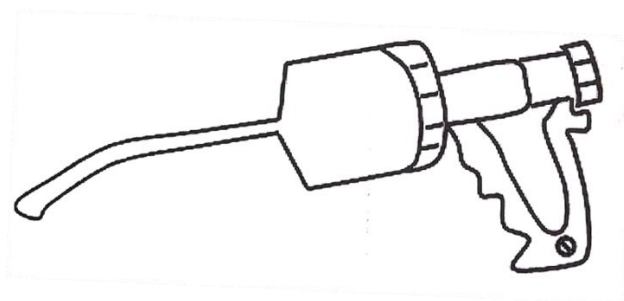
1. State any one factor that affects the speed of sound.

.....

2. Give the reason why female mosquitoes cannot spread HIV/AIDS to human beings yet they suck blood.

.....

The diagram below shows a farm equipment used on a cattle farm.  
Use it to answer questions 3 and 4.



3. Name the farm equipment shown in the diagram above.

.....

4. How is the above equipment useful to a cattle farmer?

.....

5. State one way in which typhoid affects the digestive system.

.....

6. Clouds are a mass of condensed water vapour floating in the atmosphere. How are they formed in the sky?

.....

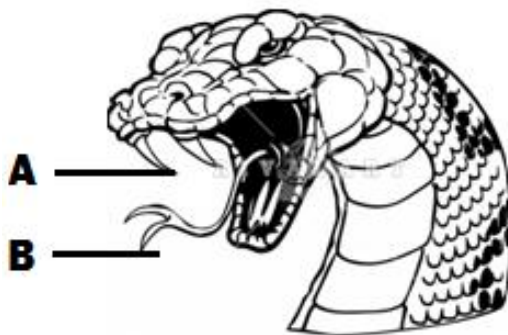
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7. The human eye is an organ for sight that has images formed on the retina. What adaptation enables the retina to form images?

.....

8. Mention any one class of food which is directly absorbed into the blood stream of the human body.
- .....
9. How is dehydration different from rehydration?
- .....
- .....
10. In which way is the glass envelope of an electric bulb able to give light to the surrounding?
- .....
11. Opondo built a house without a verandah. Why do you think a verandah would be necessary on the house?
- .....
12. Give one way in which the strength of an electoral magnet can be increased.
- .....

Use the diagram below and answer questions 13 and 14.



13. Name part marked **A**.
- .....
14. How is part **B** on the diagram above important to the snake?
- .....

16. State what would happen to an inflated balloon when released into air on a hot day.  
.....
17. Why are primate mammals known to be the most advanced group?  
.....
18. Give a functional difference between veins and arteries.  
.....  
.....
19. Which group of simple machines performs the same role as incisor teeth in human beings?  
.....
20. Mention any one characteristic of coniferous plants.  
.....
21. How can you tell that a fuse is no longer functioning?  
.....
22. Omuloni is a man who rears exotic goats for milk production. Give one exotic breed of goats kept by Omuloni.  
.....
23. How is having regular physical exercises important to the circulatory system?  
.....
24. State any one structural characteristic of blood vessels that transport blood towards the heart.  
.....
25. Trees can be harvested for wood using three methods. Identify any one method for harvesting wood.

.....

26. Write down any one component of the biotic environment.

.....

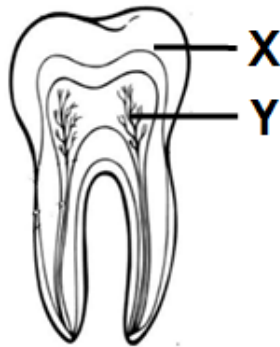
27. What property of air is applied when you press a tin having insecticides to spray against insects?

.....

28. Which essential drug is made from penicillium mould?

.....

Use the diagram below to answer questions 29 and 30.



29. Name the part labelled **X**.

.....

30. Give the function of part marked **Y** to the tooth.

.....

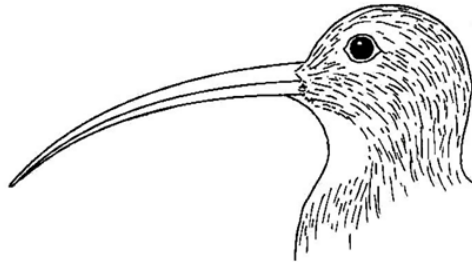
31. Name any one deficiency disease that requires one to feed on a lot of fruits and vegetables.

.....

32. Which natural process in plants increases the amount of oxygen in the atmosphere?

.....

The diagram below shows a beak of a bird. Use it to answer questions 33 and 34.



33. What kind of food does a bird with the beak above eat?

.....

34. How are birds with such a beak useful to crop farmers?

.....

35. Which chemical substance is released in the atmosphere during tobacco smoking by an active smoker?

.....

36. What do we call the pair of muscles in the human skeleton that work together while opposing each other?

.....

37. Which health condition in human beings results from reduced supply of oxygenated blood to the brain?

.....

38. Name the blood vessel that transports digested food from the ileum to the liver.

.....

39. How does a millipede protect itself from danger?

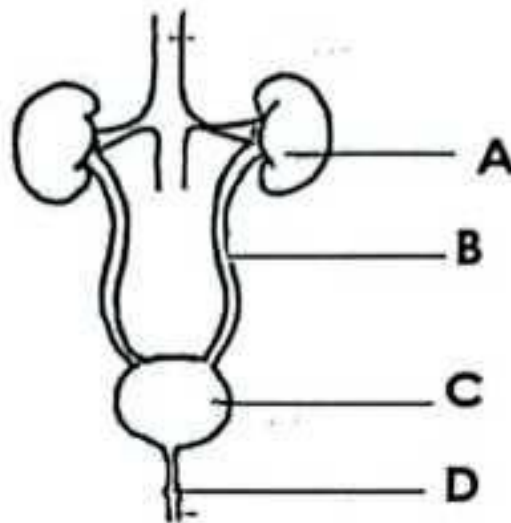
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40. Which property enables a ferry to float on the sea yet it is made of heavy metal?

.....

### **SECTION B**

41. Study the diagram below and use it to answer the questions that follow.



- a) Give the function of **A**.

.....

- b) Name the part marked with letter **B**.

.....

- c) Mention any one other organ of the excretory system apart from the one drawn above.

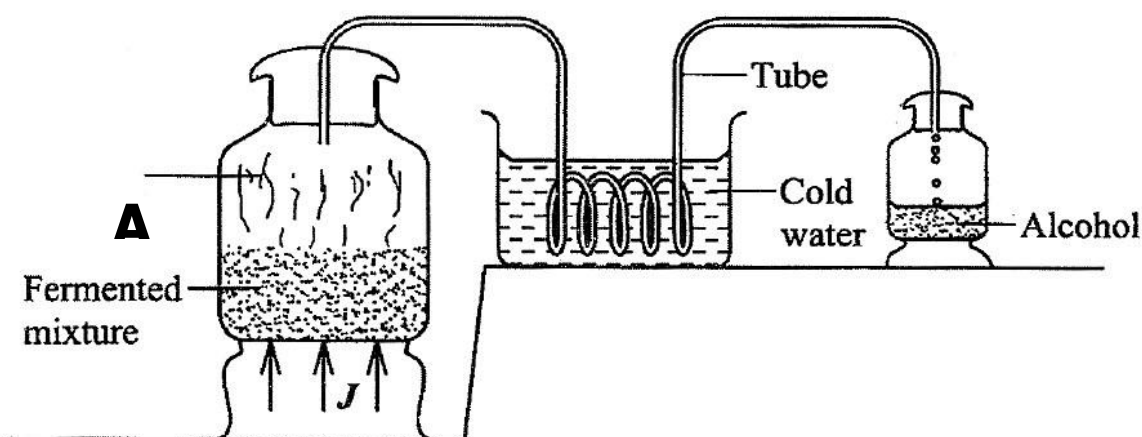
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- d) Mention any one disease that affects the above system.

.....

42. (a) Apart from salting and smoking, mention any **two** other methods used to prevent meat from going bad.
- (i) .....
- (ii) .....
- (b) In which way does salting prevent meat from going bad?
- .....
- (c) Name any **one** element of a balanced diet.
- .....

43. The diagram below shows a method of obtaining pure alcohol. Study it carefully and use it to answer the questions that follow.



- a) Identify the method of making alcohol shown in the diagram above.
- .....
- b) Name the physical process that takes place at **A**.
- .....
- c) State the importance of cold water in the above method of making alcohol.
- .....
- d) Give the reason why the delivery tube is coiled as shown in the diagram above.
- .....



44. (a) Give the meaning of the term steaming up.

.....  
.....

(b) Identify the class of food used for steaming up cows.

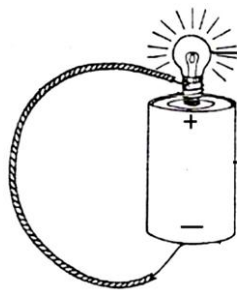
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(c) State any **two** advantages of steaming up a cow before calving.

(i) .....

(ii) .....

45. The diagram below is of an electric circuit. Use it to answer questions that follow.



(a) Show on the diagram the direction of the flow of current using as arrow.

.....

(b) Name the resistive load in the circuit above.

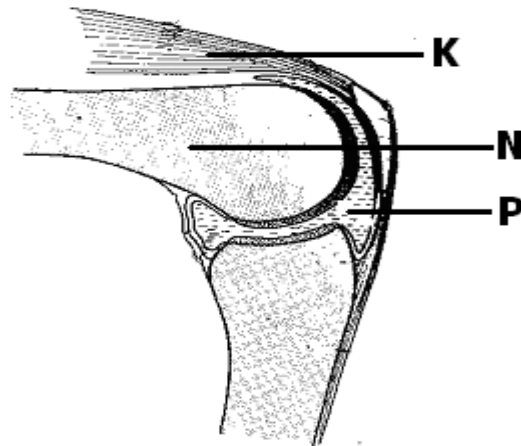
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(c) If a short circuit happened, give any two things that would happen as a result.

(i) .....

(ii) .....

46. The diagram below shows a human joint.



(a) Name the parts marked with letters **N** and **K**.

(i) **N** .....

(ii) **K** .....

(b) Give any one function of the fluid in the space marked with letter **P** in the diagram above.

.....

(c) What type of joint is shown in the diagram above?

.....

47. (a) What is meant by the term "Drug Prescription"?

.....

.....

(b) Give one advantage of following the doctor's instructions of drug usage.

.....

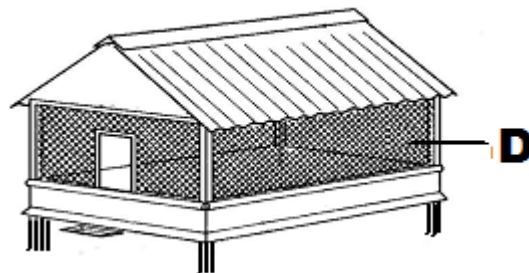
(c) Identify any one place recommended for buying drugs.

.....

(d) A doctor wrote "**2 x 3**" on a packet of drugs. What does "**2**" represent?

.....

48. (a) State any two signs of a bruise.  
 (i).....  
 (ii).....
- b) What first aid can you give to your friend with a bruised arm?  
 .....
- c) Why is it dangerous to apply animal wastes (dung) at a bruised body area?  
 (i).....  
 (ii) .....
49. (a) Write down any two instruments used to measure the weight of an object.  
 .....
- (b) What determines the sinking or floating of an object?  
 .....
- (b) Why does the weight of an object increase when an object is in air?
50. The diagram below shows a system of keeping poultry. Study and use it to answer the questions that follow.



- (a) Name the system of keeping poultry shown above.

.....

- (b) State any **one** reason why part marked **D** is used when constructing the above shown poultry house.

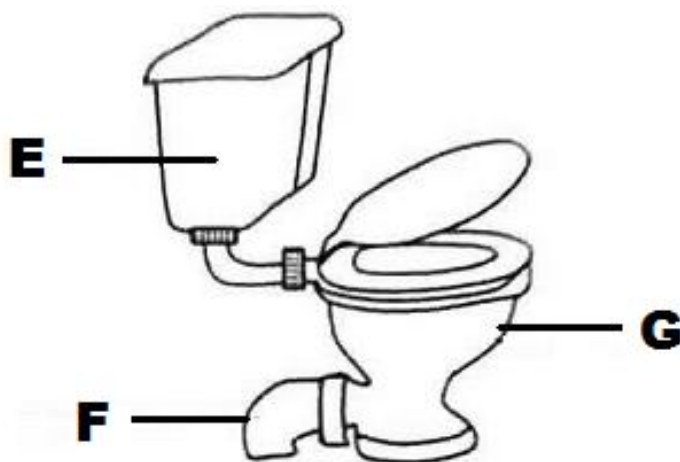
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- (c) Give any **two** advantages of using the above system of keeping poultry.

(i).....

(ii).....

51. The diagram below shows a flush toilet. Study carefully and use it to answer the questions that follow



- (a) Name the parts labeled **E** and **G**.

(i) **E:** .....

(ii) **G:** .....

- (b) State the function of the pipe marked **F** on the above toilet.

.....

- (c) Give any one way of maintaining the above toilet in a good Working conditions.

.....

52. (a) Write the meaning of the term "magnetism".

.....

.....

(b) Which artificial magnet is helpful to a pilot?

.....

(d) Explain briefly how you can prove to your friend that a magnet is strongest at its poles.

.....

.....

53. The diagram below is of a fungus. Use it to answer questions that follow.



(a) Name the fungus shown above.

.....

(b) How does the fungus above reproduce?

.....

(c) Why can't the fungus above make its own food?

.....

(d) How is the above fungus useful to man?

.....

54. (a) Name the part of the lens camera that has the same function as each of the following parts of the human eye.

(i) pupil .....

(ii) iris .....

(b) Why are images formed in the lens camera and human eye?

.....

.....

(c) Apart from appearing upside down, state any one other characteristic of images formed by both the lens camera and the human eye.

.....

55. (a) To which group of simple machines does a screw jack belong?

.....

(b) How does a screw jack make the work of raising a car easy?

.....

(c) Name the force that prevents machines from working properly.

.....

(d) Which force does a screw jack overcome when it is used to lift a car?

.....

**END**