



THE NERDS EXAMINATION SERIES

P.7 EXAMINATIONS 2024 (PRE-MOCK SET 1)

INTEGRATED SCIENCE

Time allowed: 2 hours 15 minutes

Index Number:

Random Number						Personal Number		

Candidate's Name:

Candidate's Signature:

School Name:

District Name:

DO NOT OPEN THIS BOOKLET UNLESS YOU ARE TOLD TO DO SO

Read and follow these instructions carefully:

FOR EXAMINER'S USE ONLY

1. This paper has **two** sections: **A** and **B**. Section **A** has **40** questions and section **B** has **15** questions. The paper has **12** printed pages.
2. Answer **all** questions. **All** answers to both sections A and B must be shown in the spaces provided.
3. All answers **must** be written using a **blue** or **black** ball point pen or ink. Any answer written in pencils other than on graphs and diagrams will **not** be marked.
4. No calculators or **electronic** pens are allowed in the examination room.
5. Unnecessary **changes** in your work and handwriting that cannot be read easily may lead to **loss of marks**.
6. Do not fill anything in the table indicated: "**FOR EXAMINERS' USE ONLY**" and boxes inside the question paper.

QN. NO.	MARKS	EX'ER'S INITIAL
1 -10		
11 – 19		
20 - 21		
21 - 22		
23-24		
25-26		
27-28		
29-30		
31-32		
TOTAL		

SECTION B(40marks)

1.Mention any one example of a childhood immunisable disease.

2.Identify the part of the digestive system where alcohol is absorbed.

3.In which way does the use of solar energy for cooking help to conserve the environment?

4.How are screws similar to wheels and axles in the way they simplify work?

5.Name the type of germ which causes ringworm infection.

6.How is the cause of burns similar to that of scalds?

7.Give one way in which reflection of light is useful to people

8.What term refers to the practice of growing crops and trees together on the same piece of land?

In the diagram below, a plastic comb was rubbed against a woolen cloth and it was brought nearer to small pieces of paper.



9.Why is the plastic comb able to attract the pieces of paper as shown above?

10.What form of energy is stored in a candle?

11.Name the fungal – caused sexually transmitted disease, which is spread throughpoor hygiene.

12.Which method of heat transfer helps farmers to dry their harvested crops?

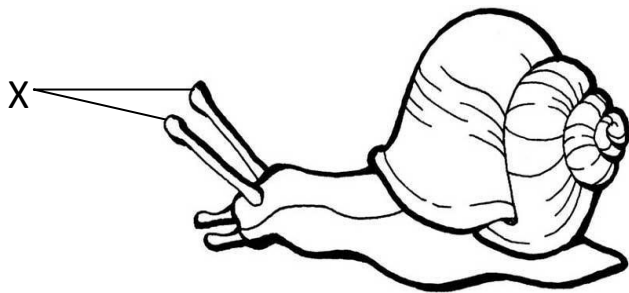
13.Give one sign of pest and disease attack on tuber crops.

14.Identify one condition needed by bacteria to multiply.

15.Give any one good effect of changes in the environment.

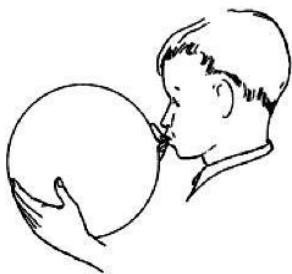
16.How can foot and mouth disease be controlled on a farm?

Study the diagram below and answer the questions about it.



17. How are structures marked X useful to the above organism?
.....
18. Which disease is spread by the above organism to people?
.....
19. How is the above organism similar to a maggot?
.....
20. Why should a pig sty have a slanting floor?
.....
21. Give one way in which music stored by staff notation can be reproduced
.....
22. In the space below, draw a vein and show the flow of blood in it
.....

23. Give one factor that leads to sickness in a home.
.....
24. What type of root system does an onion plant have?
.....
25. Apart from production of eggs (ova), mention one other use of the ovaries in the human body.
.....
26. How does a sweater help to keep a person warm during cold days?
.....
27. Write down any one example of an animal fiber.
.....
28. State the compass direction in which a freely suspended magnet will rest?
.....
29. Give any one property of air in the diagram below.
.....

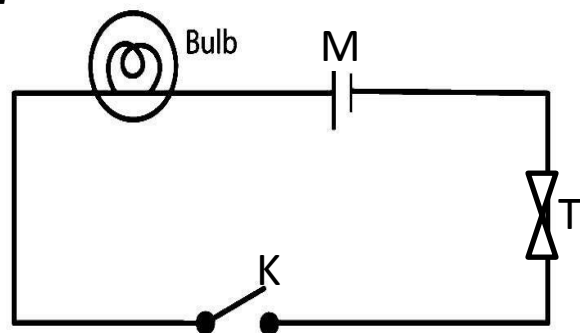


30. Which body sense is used by Phionah to know whether Alex has dressed perfume?
.....
31. Why is photosynthesis important to animals?
.....
32. What process makes dew to disappear during hot days?
.....
33. What group of birds are vultures, kites and crows?
.....

34. Why does an insect die when its abdomen is placed in oil for some time?
.....
35. Give any one special characteristic of the air we breathe out.
.....
36. Find the density of an object whose mass is 19g and volume is 5cm³.
.....
37. Why does smoke go up when firewood is burning?
.....
38. Give one reason why should drugs be prescribed by health workers before they are used by sick people
.....
39. What feature enables a housefly to spread diseases?
.....
40. Give any one characteristic of flowers which attract moths to visit them at night.
.....

SECTION B(60marks)

41. The diagram below shows a simple circuit. Study it carefully and use it to answer the questions that follow.

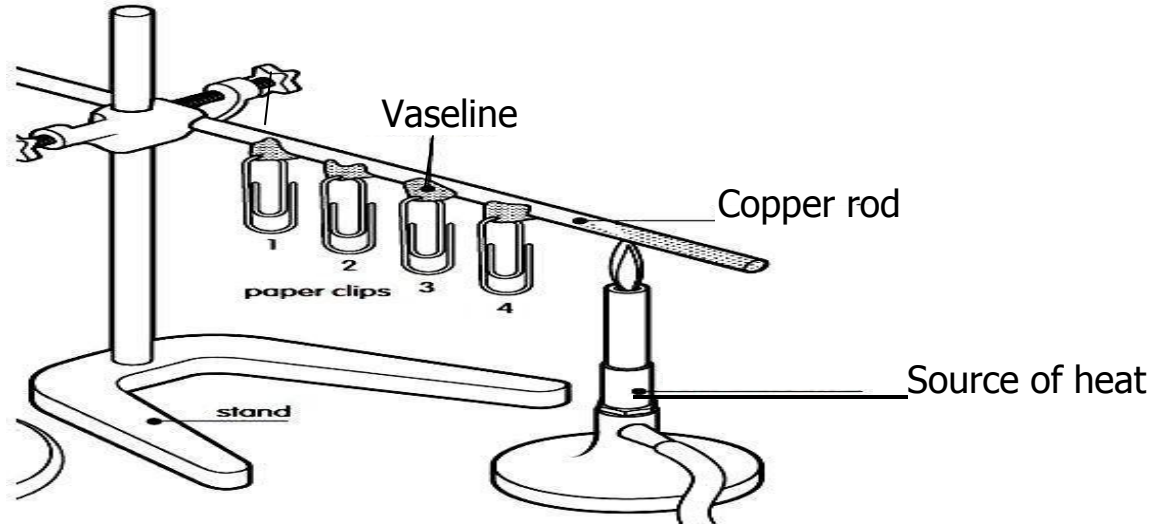


- (a) Name the part marked with letter T
.....
- (b) Give the function of the part marked with letter M
.....
- (c) State any one energy change which takes place in an electric bulb when part labeled K is closed.
.....
- (d) Using an arrow, show the direction of the flow of electrons in the diagram above.
.....
- 42 (a) State the difference between endoskeleton and exoskeleton.
.....
- (b) State the protective function of the skull to the human skeleton.
.....
- (c) Write two advantages of maintaining proper body posture.
(i)
(ii).....
- 43 (a) Why do earth worms come out of the soil after it has rained?

-
- (b) Give two ways in which earth worms are useful to farmers.
- (i).....
- (ii).....
- c) To which group of animals do earth worms belong?
-

.....

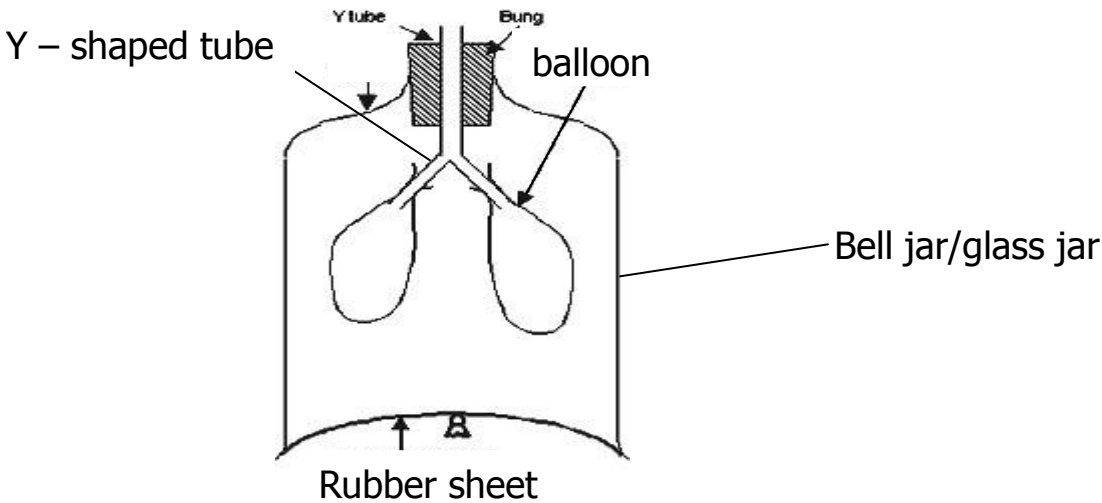
44(a) The diagram below is an experiment performed by a P.7 class. Study it and answer the questions that follow about it.



- (a) What is the experiment about?
-
- (b) What is the importance of Vaseline in the experiment?
-
- (c) What will happen to Vaseline in clip 4 after sometime?
-
- (d) Give a reason for your answer.
-

- 45(a)Mention any two services provided to expectant mothers during ante – natal care
- (i).....
- (ii).....
- (b)Write down any one primary sex characteristic that is common in both boys and girls.
-
- (c) State any one role played by children in promoting PIASCY at school.
-

46 The experiment below demonstrates the process of breathing in human beings. Study it carefully and use it to answer the questions that follow.



- (a)What does the Y- shaped tube represent on the diagram above?
-
- (b) What happens to the rubber sheet when it is pulled down?
-

.....
.....
(c) Why is there an increase in the percentage of carbon dioxide we breathe out than the one we breathe in?
.....
.....

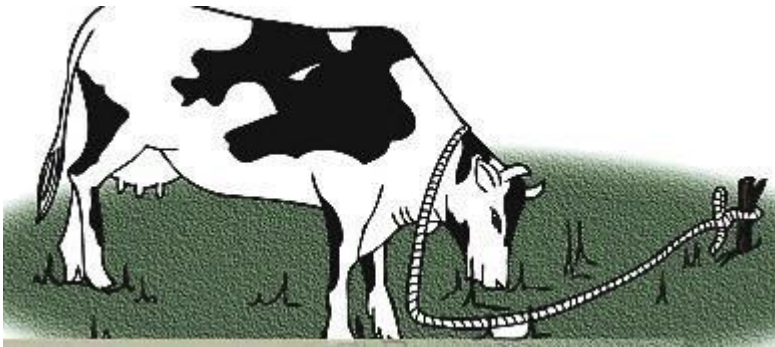
(d) Give the importance of cilia found in the nose during the process of breathing in.
.....
.....

47a) What term refers to the deposition of eroded soil into water bodies?
.....
.....

b) In which two ways does uncontrolled bush burning degrades the environment?
(i).....
(ii).....

(c) Give one way in which silting affects fish.
.....
.....

48. The diagram below shows a method of grazing cattle. Use it to answer the questions that follow.



(a) Identify the method of grazing cattle shown above
.....

(b) State any one advantage of the above method of grazing cattle.
.....
.....

(c) How does paddock grazing help to control tick borne diseases?
.....
.....

(d) State one way in which colostrum is important to a newly borne calf.
.....
.....

49(a) How is a pineapple plant similar to a banana in the way they are propagated?
.....
.....

(b) Give two advantages of vegetative propagation over seed propagation.
i).....
(ii).....

(b) Which method of seed dispersal involves bursting/splitting of a pod violently due to long exposure to sun's heat?
.....
.....

50. The table below shows parts of a flowering plant, their functions are in the wrong order. Match the parts to their function.

Parts of a flowering plant	Function of the part
Leaves	Develop into fruits and seeds
Roots	Transports water and mineral salts
Stem	Manufacture food for the plant
Flowers	Absorb plant nutrients from the soil

- (a)Leaves.....
- (b)Roots
- (c)Stem
- (d)Flowers

51(a) Name the waste material excreted by the liver.

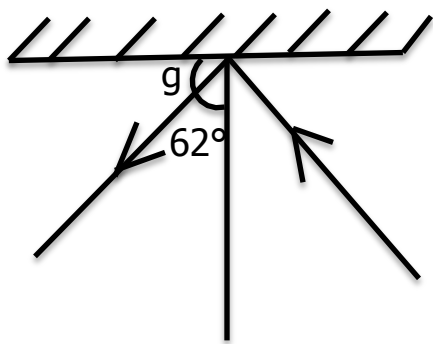
(b) State the role of melanin pigment in the human skin.

- c) State two disorders of the human skin.
- i).....
- ii)

52a) Give any one reason why light is regarded as a form of energy.

 (b) In which way do opaque materials affect light?

(c)The diagram below shows regular reflection of light. Study it carefully and find thevalue of **g** in degrees **(02mks)**



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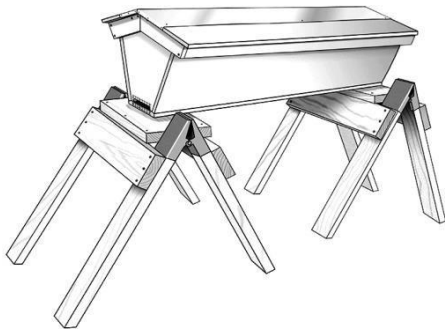
53(a) Name any two examples of anti-social behaviours among people in the community.

- (i).....
- (ii).....

(b) Mention any two effects of anti-social behavior to school children.

- i)
- ii)

54 (a) Name the type of a bee hive drawn below.



.....

(b) How is honey harvesting different from honey extraction?

.....

(c) Give two methods of honey extraction apart from centrifuging method.

i)

ii)

55a) Name the first set of teeth in babies.

.....

.....

(b) How are molars and pre molars adapted to their function?

.....

.....

(c) Give two teeth disorders apart from broken teeth.

(i).....

(ii).....

END