



Dr. Bbosa Science

UGANDA NATIONAL EXAMINATION BOARD  
PRIMARY LEAVING EXAMINATION



Science 2014

Time allowed: 2hours 15 minutes

Index No:

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Candidate's Name.....

Candidate's signature.....

District Name.....

Read the following instructions carefully

1. This paper has two sections **A** and **B**. Section **A** has 50 questions and section **B** has 5 questions. The paper has 15 pages following altogether.
2. Answer all questions. All answers to both sections A and B must be **written** in the spaces provided.
3. All answers must be written using a blue or black ball-point pen or ink. **Any** work written in pencil other than graphs, pictures and diagrams will **not** be marked.
4. Unnecessary change of work may lead to loss of marks.
5. Any handwriting that cannot easily be read may lead to loss to marks.
6. Do not fill anything in the boxes indicated:
7. "For examiners". Use only and inside the question paper

FOR EXAMINERS USE ONLY		
No	MARKS	EXR'S NO.
1-10		
11-20		
21-30		
31-40		
51		
52		
53		
54		
55		
<b>Total</b>		

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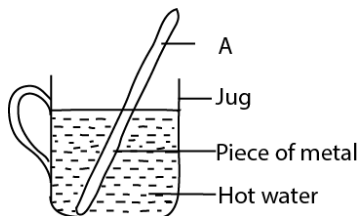
1. Which type of soil has rough and large particle?  
Sandy soil
2. In which state of matter does heat travel slowest  
Solid state
3. To which class of levers does a wheel barrow belong?  
*Second class lever.*  
*Note in second class lever, the load is between the fulcrum and the effort*
4. Apart from labor, give **one** other requirement for starting a livestock farm.
  - Capital
  - Market for the product
  - Land
  - Water source
  - management
5. What kind of accident requires the use of splints in giving First Aid?  
Fracture
6. Give any one exotic breed of sheep kept for wool production.  
Merino, Romney marsh, Corriedale



Sheep kept for wool



7. Which sexually transmitted disease can cause blindness in babies?  
Gonorrhoea
8. Name the human body organ that uses light for it to function.  
The eye
9. State **one** way in which echo can be reduced in a hall.
  - Use of blanket
  - Putting ceiling boards
  - Thick carpet
  - curtains
10. The diagram below shows a piece of metal dipped in a jug containing hot water. Use it to answer the questions that follow.



How does part A become hot yet it is not in hot water?

By conduction

11. Give any one disadvantage of harvesting honey using fire
  - Kills bees
  - Burns the hive
  - Make honey dirty
  - Melt honey comb
12. How is BCG vaccine different from the polio vaccine in the way they are given to children.  
BCG vaccine is administered through injection while polio vaccine is administered orally.



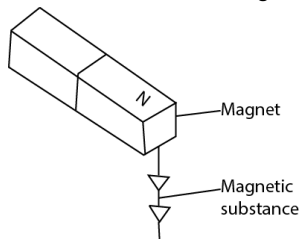
BCG vaccination



Polio vaccination

13. Give one reason why washing of hands after visiting a latrine is a good practice.  
Removes germs from the hands
14. Which process in plants has a similar function as sweating in humans?  
Transpiration
15. Apart from taking wrong dose, give one other way in which drugs are misused.
  - Taking drugs when not sick
  - Taking drugs for wrong disease
  - Taking drug at wrong time
  - Sharing drug with another person
16. Which condition in babies is shown by sunken spot on the head?  
Dehydration
17. Give one way in which plants benefit from animals for photosynthesis.  
Get carbon dioxide
18. How is sun-drying helpful in the preservation of food crops?  
Reduce water content and dry them

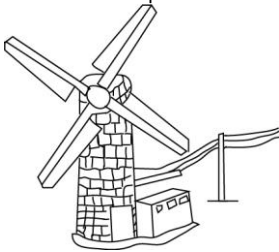
19. Why is water grouped under renewable resource?
- It cannot be exhausted
  - Can be replaced when used
20. Which mineral helps in formation of red blood cells in the human body?
- Iron
21. Apart from melting, state any one other physical change that takes place in the presence of heat.
- evaporation or sublimation
22. Name any one disease of rabbits that affects poultry birds.
- Coccidiosis
  - Pneumonia
23. Name the method of making a magnet shown in the diagram below



The method is by induction

24. In which method of making water clean, do you first allow the impurities to settle at the bottom of the container?
- Decanting
25. Why does a coin thrown in a basin full of water appear to be nearer to the surface?
- Due to refraction
26. How is reproduction in whale different from that of fish.
- Whales produce younger one alive while fish lay eggs.
  - Whale undergo internal fertilization while fish undergo external fertilization.
27. Why is it important for government to collect information on human health?
- To plan health units
  - To budget for medicine
  - To plan training medical workers
28. State any one piece of advice you would give to a person who suffers from indigestion.
- To chew food properly
  - Eat food rich in roughages
  - Eat a lot of fruits and vegetables

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29. The diagram below show how electricity is produced  
Use it to answer the question that follows:



What source of energy is used to produce the electricity?

Wind energy

30. Why does paraffin settle on top when mixed with water?  
Paraffin is less dense than water or water is denser than paraffin
31. Give any way in which bacteria are useful to crop farmers?
- They fix nitrogen
  - Convert plant remains to humus
  - Decompose organic matter to form manure
32. Mention the group of birds to which a crested crane belongs

Wading birds



Crested crane

33. Which disease is spread to human by rats?  
Plague
34. How is the function of the pulmonary vein different from that of other veins?  
Pulmonary vein carries oxygenated blood whereas other carry deoxygenated blood.
35. Which property of air enables you to drink soda using a straw  
Air exerts pressure
36. Why do plane mirrors produce regular reflection of light?  
Has a smooth polished surface
37. What name is given to a meal containing all food values in their right amount?  
Balanced diet

Commented [s1]:



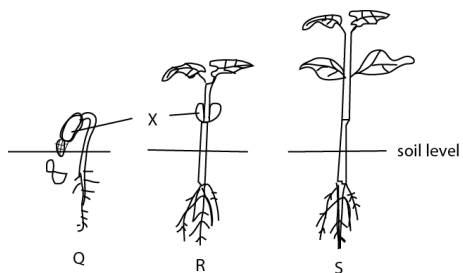
Balanced diet

38. State one way in which married couple can avoid HIV/AIDS among themselves.  
Being faithful to each other
39. Give one way in which the use of solar energy is good to our environment.  
Does not pollute environment
40. Apart from the number of body parts, state one other difference between Arachnids and insects.
- Arachnids have four pairs of legs while insects have three pairs of legs
  - Arachnids have no antennae/feelers whereas insects have
  - Arachnids use lung-book for breathing while insects use trachea system

### SECTION B

Questions 41 to 55 carry **four** marks each

41. (a) Name two poisonous substances found in tobacco
- (i) Tar
  - (ii) Nicotine
- (b) State any two effects of cigarette smoking by pregnant women to their unborn babies
- (i) leads to underweight
  - (ii) leads to still birth
42. The diagram below Q, R and S show the stages of germination of a seed. Study and use it to answer the questions that follow.



- (a) Name the part marked X: cotyledon
- (b) How is the part marked X useful to the seedling at stage R.  
Provides food to the growing plant

- (c) Why is the part marked X useless at stage S?  
The food in the cotyledon is used up and the plant is able to photosynthesize
- (d) What type of germination is shown by the seed?  
Epigeal germination

43. The table below shows joints and their position in the human body.  
Study and complete it correctly

Joints	Position in the body
Pivot joint	Neck
Ball and socket joint	shoulder
Hinge joint	Knee
Suture joint	Skull

44. (a) State any two agents of soil erosion
- Wind
  - Running water
  - Animals
- (b) Give two ways in which soil erosion can be controlled in hilly areas.
- by terracing
  - by contour ploughing
  - by strip cropping
  - By agroforestry
  - By planting trees
45. (a) what type of change takes place when an iron tool rusts?  
Chemical change
- (b) Give two conditions necessary for rusting to take place on an iron tool
- oxygen (not air)
  - water
- (c) state any one effect of rusting on iron tools.
- weakens tools
  - make tools dull/ugly
  - make tool blunt
46. (a) Apart from egg eating, name any one other vice of poultry.
- Feather pecking
  - Cannibalism

- Egg hiding
- Pica or sometimes, birds start eating materials which are not fit for consumption, such as feathers, litter material, threads, etc

(b) Give any one cause of egg eating in poultry

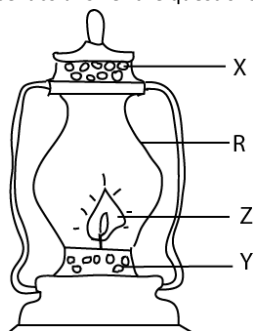
- boredom
- lack of enough calcium in the diet
- Delay to pick eggs
- lack of food
- Freedom of movement allows birds to hide eggs in the field

(c) State any two ways of preventing the egg eating vice in poultry.

- make laying boxes dark
- give enough food with calcium
- timely picking of eggs
- provide enough space
- provide vegetables

47. The diagram below shows a kerosene lamp

Study and use it to answer the questions that follow



(a) Name the part marked with letter Z.

Flame or fire

(b) Why is the part marked R made of glass?

To allow light to pass through

(c) Give the importance of the parts marked X and Y when the lamp is in use.

- (i) To let out carbon dioxide, heat and smoke
- (ii) To let in fresh air

48. (a) Name the group of crops that are harvested year after.

Perennial crops

(b) Give any two examples of crops that belong to the group you have named in (a) above

- (i) coffee, tea, mangoes, orange, Banana, sisal,
- (ii) coconut, pyrethrum, oil nut, paws



(c) State one way in which the above crops are harvested.

- (i) By hand picking
- (ii) plucking
- (iii) Uprooting
- (iv) Cutting
- (v) digging

49. The table below shows a group of animals in A with their respiratory organ in B.

A	B
Tilapia	Moist skin
Mosquito	Lungs
Frog	Gills
Dog	spiracles

Write against each animal below, its respiratory organ from B.

- (i) Tilapia: *Gills*
- (ii) Mosquito: *spiracle*
- (iii) Frog: *moist skin*
- (iv) Dog: *lungs*

50. (a) In the human reproductive system, state where each of the following processes take place:

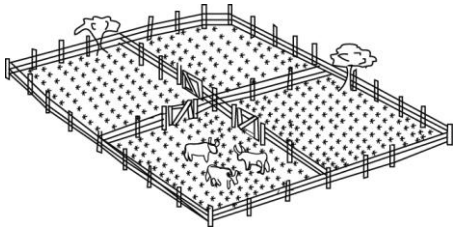
- (i) Implantation: : uterus
- (ii) Production of sperms: testis
- (iii) Production of female hormones: ovaries

(b) Give any one use of the placenta to the foetus during pregnancy

- supplies food, oxygen, hormones
- prevent disease germs from reaching the foetus
- attachment of the foetus to the mother
- to deliver carbon dioxide and wastes from the foetus

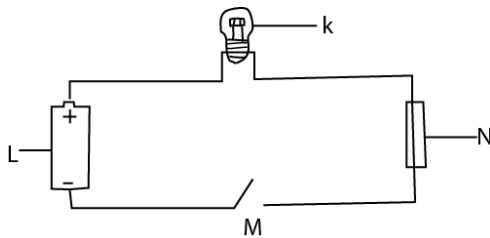
51. The diagram below shows a system of grazing cattle.

Study and use it to answer the questions that follow.

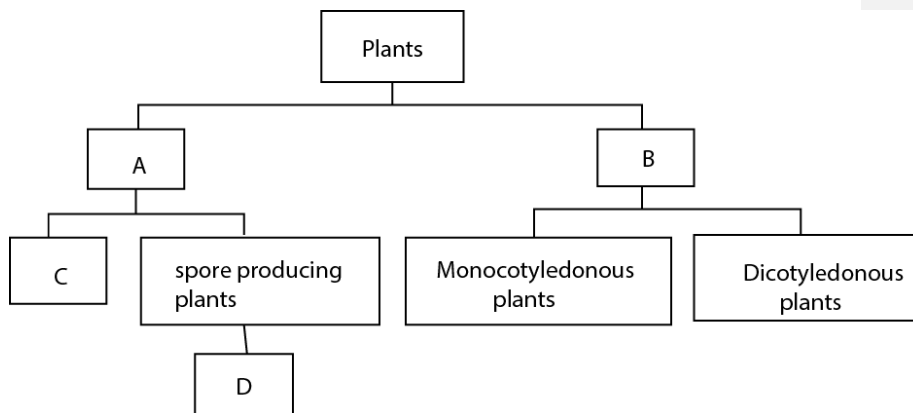


- (a) Name the system of grazing cattle shown in the diagram above.  
Paddock system
- (b) Besides restricting the animals, give two other advantages of this system of grazing cattle.
- Gives pasture time to grow
  - Control breeding of pest
  - Control soil erosion
  - Give animal enough exercise
  - Prevent overgrazing
  - Isolate sick animals
- (c) State any one disadvantage of the system of grazing cattle shown in the diagram
- It is expensive
  - Requires a big piece of land
52. (a) Give two ways in which Primary Heathy care (PHC) is an important program in the community
- Controls population growth
  - Helps prevent malnutrition in babies
  - Promotes safe water and sanitation
  - Ensure care for the disadvantaged
- (b) state any two roles of school healthy committee.
- organizes pupils to clean the environment
  - conducts health parades
  - identify and finds a solution to healthy problem
53. (a) What name is given to a practice of growing crops and trees together on the same piece of land?  
Agroforestry
- (b) State any two ways in which crops benefit from trees when they grow together.
- Trees provide shades
  - trees act as weed breaker
  - leaves from trees form manure
  - Trees provide support to climbing crops
- (d) Give any one proper method of harvesting trees in the practice named in (a) above
- Pollarding/ cropping/selective felling

54. Study the diagram of an electric circuit below and use it to answer the questions that follow



- (a) Name the parts marked K and N
- K: bulb
  - N: Fuse
- (b) State the energy change that takes place at L when M is closed  
Chemical energy is converted to electric energy.
- (c) Give any one form of energy produces at K when M is closed  
Light and heat
55. The table below shows classification of plants.  
Study it carefully and use it to answer the questions that follow.



- (a) Name the group of plants shown by the following letters:
- A: nonflowering plants  
B: flowering plants  
C: conifer, seed producing plants
- (b) Give any one plant that belongs to the box labelled D  
Fern, mosses, liverworts