THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL
PRIMARY SCHOOL LEAVING EXAMINATION

05E **SCIENCE**

Time: 1:30 Hours ***Wednesday, 7th September 2011 a.m.***

Instructions

1. This paper consists of **fifty (50)** questions.
2. Answer **all** questions.
3. **All** answers must be written in the answer sheet provided.
4. Cellular phones are **not** allowed in the examination room.
5. Write your **Examination Number** on your answer sheet.
6. Use **blue or black** pen in writing your answer. Answers **written by pencil will not be marked.**

Choose the correct answer and write its letter beside the question number in the answer sheet provided.

1. The instrument used to observe cells of living things is called
   A Telescope B Periscope C Microscope D Camera E Horoscope.

2. The sense organ which is used to detect the degree of hotness or coldness is
   A tongue B ear C eye D nose E skin.

3. Which of the following is a mammal?
   A Pigeon B Hen C Duck D Bat E Snake.

4. Figure 1 shows a dicotyledonous seed.

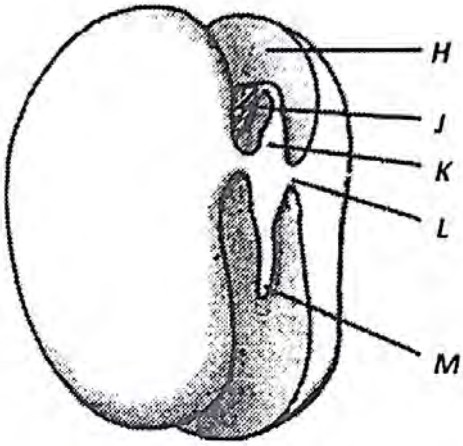


Figure 1

Which of the letters in Figure 1 indicates the part that grows into a root?
A *H* B *J* C *K* D *L* E *M*.

5. What will happen if the flowers of the maize plant are removed?
   A The plant will flourish
   B The plant will die
   C The roots of the plant will not grow
   D The leaves will change its color
   E The plant will not reproduce.

6. The following are necessary for the formation of carbohydrates in plants.
   A Oxygen, chlorophyll and water
   B Carbon dioxide, water and sunlight
   C Oxygen, carbon dioxide and water
   D Chlorophyll, water and sunlight
   E Chlorophyll, starch and sunlight.

7. The excretory products from the lungs are
   A Oxygen and water B Oxygen and carbon dioxide
   C Carbon dioxide and water D Carbon dioxide and salt
   E Oxygen and salt.

8. Which of the following transfers pollen grains from the stamen to the stigma?
   A Man B Insects C Water D Dew E Style.

9. A person who does not eat fruits and green vegetables is likely to face which of the following problems?
   A Suffer frequent illness B Decrease in body weight
   C Increased appetite to eat meat D Color of the skin become yellow
   E Increase in body weight.

10. A child with kwashiorkor is lacking food rich in
    A vitamin B fat C minerals D starch E protein.

11. Water snails spread disease known as
    A bilharzias B tetanus C cholera D measles E elephantiasis.

12. The main vessel which take blood from the heart is known as
    A vein B aorta C vena cava D pulmonary E hepatic.

13. The hormone which regulates oxygen intake in the human respiratory system is known as
    A adrenaline B insulin C thyroxin D estrogen E amylase.

14. Under normal circumstances, the difference between inhaled air and exhaled air is that exhaled air contain a lot of
    A oxygen B hydrogen C water
    D nitrogen E carbon dioxide.

15. Disease known as goiter is caused by the deficiency of
    A Iron B Iodine C Calcium D Potassium E Phosphate.

16. Beriberi disease is caused by deficiency in vitamin
    A B_1 B B_2 C D D C E A.

17. Fish breath through
    A nose B mouth C fins D gills E scales.

18. Food that has been digested in the small intestine is distributed to other parts of the body through
    A water B oxygen C blood D diffusion E absorption.

19. Which type of food among the following is responsible for repairing human body cells?
A Fat B Starch C Fruits D Protein E Minerals.

20. Why is family planning important to the family?
A It enables the family to own a house
B It increases the number of children
C It enables the family to travel together
D It makes the family members happy
E It enables the family to get enough food.

21. First aid is the treatment given to
A people who are suffering from known illnesses
B the sick person after being discharged
C show the doctor's expertise in treatment
D the person before being taken to hospital
E showthe tasks performed by Red Cross.

22. The purpose of spreading honey on a fresh burn wound is to
A decrease severe pains
B give energy to the body
C provide first aid treatment
D protect the wound from getting dirty
E prevent contraction of tetanus.

23. A person who is vomiting is given which of the following as first aid?
A Boiled milk
B Juice prepared from lemon
C A solution of sugar and lemon
D A solution of sugar and salt
E Rest in a cold and quiet place.

24. Which of the following are necessary for giving first aid to a person with bone fracture without a wound?
A Scissors, bandage, splinter, thread and safety pin
B Towel, soap, stretcher, cotton wool and spirit
C Towel, water, oil, splinter and soap
D Blanket, chair, soap, rope and scissors
E Blanket, bandage, splinter, scissors and rope.

25. After providing first aid to an injured person, the person should be
A given enough drinking water
B sent to a hospital for treatment
C given mouth to mouth ventilation
D laid down under a tree shade
E given complete bed rest

26. The chemical break down of proteins begins in the
A mouth B stomach C rectum D large intestine E small intestine.

27. The first aid suitable to a person who has taken poison is to
A make him vomit
B give him milk to drink
C provide him with medicine
D give him drinking water
E provide him with glucose.

28. Matter can exist in the following states
A Liquid, water and gas
B Solid, liquid and air
C Solid, liquid and gas
D Stones, solid and gas
E Solid, air and gas.

29. By which of the following methods can salt that has dropped in a bucket of water be separated?
A Filtering the mixture
B Filtering the solution
C Evaporating the solution
D Boiling the mixture
E Evaporating the mixture.

30. In soap manufacturing, sodium hydroxide is mixed with boiling fat. If sodium hydroxide is not available, which one of the following can be used?
A Ash from leaves
B Solution of lemon
C Cassava flour
D Coconut oil
E Pawpaw leaf extract.

31. Melting of ice refers to which type of change?
A a chemical change
B a physical change
C an environmental change
D a biological change
E a physiological change.

32. The natural way of fertilizing the soil is to
A mix cow dung with artificial fertilizers
B burn all trees which dry water sources
C burn leaves and remains of maize plants
D reduce the number of cows grazing on the land
E cultivate leguminous crops by rotation.

33. The simplest method of changing hard water to soft water is to
A use water cleaner
B dilute the water
C boil the water
D melt the solid portion
E filter the solids.

34. Which of the following can be separated by magnet?
A Iron particles and sand
B Flour and pieces of paper
C Plastic pins and sand
D Glass particles and sand
E Sand and rice.

35. Changes of weather and water are agents which help
A the soil surface to look good
B animals to adapt themselves
C plants and animals to exist
D to speed soil erosion
E to balance food chain.

36. The gas which supports combustion is
A hydrogen B nitrogen C ozone D natural gas E oxygen.

37. Observe Figure 2 carefully and then answer the question that follows.

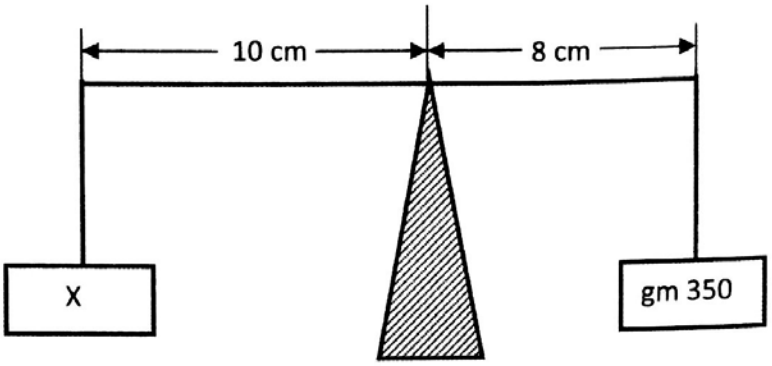


Figure 2

Find the value of **X** in Figure 2.
A 250 gm B 280 gm C 437.5 gm D 240 gm E 175 gm.

38. The inside walls of a thermos flask have silver coating in order to avoid loss of heat through
A conduction B reflection C convection D refraction E radiation.

39. The retina of the eye is similar to which part of the camera?
A Film B Lens C Bulb D Switch E Focus.

40. Heat is transferred in solid matter through
A conduction B convection C radiation D vibration E absorption.

41. In machines the mechanical advantage is the ratio between
A force exerted at the fulcrum to the force exerted by the load
B the distance from the fulcrum to the distance where the load is placed
C force exerted by the load to the force exerted at the fulcrum
D the distance from the load to the distance where the fulcrum is placed
E the force applied at one point to the force at the other point in the machine.

42. Identify the mirror which gives an upright image that resembles the real object and is at equal distance from the mirror to the image and to the real object.
A Concave mirror B Biconcave mirror C Convex mirror
D Prism mirror E Plane mirror.

43. The electric current in the circuit is 2 amperes. If the voltage in the circuit is 4 volts the resistance will be
A 3.5 ohm B 4 ohm C 2 ohm D 5 ohm E 0.5 ohm.

44. Observe the electric circuit shown in Figure 3 and then answer the question that follows.

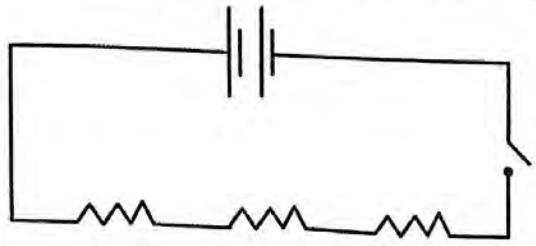


Figure 3

What is the name of the circuit shown in Figure 3?

A Series circuit B Parallel circuit C Resistance circuit
D Alternating circuit E Low tension circuit.

45. Venereal diseases are spread by

A touching one another B blood transfusion C playing together
D sharing cups E sexual intercourse.

46. Which blood cells in human body are attacked by HIV?

A Red cells B Platelet cells C White cells
D Sickle cells E Plasma cells.

47. The proper method of preventing people from getting HIV is to

A stop drinking alcohol B avoid unprotected sex
C participate in religious preaching D distribute drugs to the victims
E publicize the names of the victims.

48. Which of the following sentences is true about HIV/AIDS?

A HIV is spread by mature people only
B Healthy looking people do not have HIV
C HIV/AIDS affect people of all ages
D All people suffering from cancer have HIV
E Vaccination prevents contraction of HIV.

49. The service that needs to be given to people living with HIV is to

A give them houses for living
B give them financial assistance
C give them counseling
D give them free education
E to assist them in opening bank accounts.

50. In scientific investigation data collection is done by

A travelling to various places B reading different literature
C identifying the problem D formulating hypothesis
E doing several experiments.