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

05E **SCIENCE**

Time: 1:30 Hours **Wednesday, 10th September 2014 a.m**

Instructions

1. This paper consists of **fifty (50)** questions.
2. Answer **all** the questions.
3. Read all the given instructions in the **special answer sheet (OMR)** and fill in **all** the required information.
4. Write your **Examination Number** and then **shade the digits** of the number in the respective place in your answer sheet.
5. **Shade** the letter of the correct answer for each question in the answer sheet provided, for example, if the correct answer is A shade as follows:



6. If you have to change your answer, you must rub out the shading **very neatly** before shading the new one. Use a **clean rubber**.
7. Use **HB pencil** only.
8. Cellular phones are **not allowed** in the examination room.

Choose the correct answer and **shade its letter** beside each question in the answer sheet provided.

1. Which of the following diseases can be spread by houseflies and cockroaches?
   A Chicken pox B Diarrhoea C Whooping cough
   D Malnutrition E Typhoid.

2. Which of the following is not found in the blood system?
   A Bronchiole B Valve C Auricle D Capillary E Artery.

3. Which of the following should be considered before attending a person suffering from AIDS?
   A Wear clean clothes B Wash yourself with soap C Wear gloves
   D Pray E Allow him/her to rest.

4. Which of the following is a characteristic of clean and safe water?
   A Fetched from wells
   B Stored and cooled in a water pot
   C Filtered and stored in clean container
   D Boiled, filtered and stored in clean container
   E Without a lot of soda ash.

5. Which of the following diseases does not have a vaccine?
   A Tuberculosis B Tetanus C Measles
   D Whooping cough E Trachoma.

6. The gas used by plants to manufacture proteins is
   A carbon dioxide B hydrogen C oxygen
   D nitrogen E natural gas.

7. The amount of water lost by plants increase due to the presence of which condition in the environment?
   A Heat and water vapour B Water vapour and light
   C Wind and sun rays D Clouds and wind
   E Water vapour and wind .

8. People are likely to cause soil erosion if they do one of the following:
   A Cut down trees B Add manure to the soils
   C Plant grass D Make terraces on sloppy ground
   E Plant trees.

9. Agriculture, livestock keeping and mining are activities done by human beings and all depend on
   A rivers B springs C land
   D irrigation E wind.

10. A chameleon usually changes its colour in order to
    A search for food B breath C reproduce
    D observe enemies E protect itself.

11. How many stages are there in the growth of a cockroach?
    A Two B Three C Four D Five E Six.

12. Which of the following does not have vertebral column?
    A Spider B Bat C Cat D Man E Chicken.

13. One of the functions of the muscles in the body is to
    A prevent bleeding B cause various movements
    C produce red blood cells D hold the teeth in place
    E transport blood in the body.

14. Human bones are joined in order to
    A prevent breakage B make them of the same size
    C enable them to bend easily D make the shape of the body
    E enable them to straighten.

15. Which of the following bend when passing from one medium to another?
    A Rainbow B Parallel lines C Light ray
    D Lens focus E A ray and lens focus.

16. In the light spectrum, the colour which bends earlier than others is
    A red B yellow C indigo D blue E violet.

17. Study Figure 1 which shows the internal part of a bean seed.

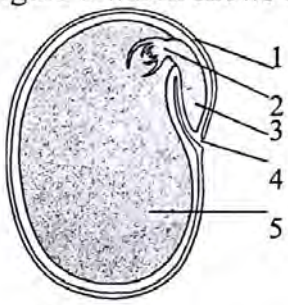


Figure 1

Which part is responsible for protecting the seed from harmful insects or changes in temperature?
A 2 B 3 C 5 D 4 E 1.

18. The sky looks blue because
    A air and water are bluish
    B red colour is dispersed more than blue colour
    C vision power decreases
    D blue colour is dispersed more than other colours
    E during sunset, the sun appears yellowish.

19. Which of the following items does not use magnet?
A Loud speaker B Telephone C Radio
D Mobile phone E Iron.

20. The unit of work is
A Kilogram B Newton C Tonne D Joule E Gram.

21. In the normal procedure, the first stage to be followed when conducting a scientific experiment is
A to start an experiment B data collection C problem identification
D data analysis E interpretation of results.

22. The third stage in a scientific experiment is
A data analysis B interpretation of results
C preparation and starting the experiment D data collection
E problem identification.

23. Bahati put a red litmus paper in an unknown chemical compound. The colour of the litmus paper changed to blue. This show that the chemical compound had
A acid B ash C water D fat E spirit.

24. The results of an experiment may be in the following two forms.
A True or false
B Analysed and not analysed
C With questions and without questions
D Preliminary results and medium results
E Preliminary results and final results.

25. What will happen if NORTH and NORTH magnetic poles approach each other?
A They will strongly attract each other
B They will attract each other towards one direction
C They will repel
D Nothing will happen
E They will break.

26. PQ is a ruler whose length is half a metre. A load of 20 gm is placed at P a distance of 0.1 m from the fulcrum. If a load is placed at Q a distance of 0.4 m from the fulcrum, what will be the weight of M when the rule is balancing?

A 4 g B 10 g C 5 g D 2.5 g E 25 g.

27. The concept of reflection of light is manifested in one of the following things:
A Microscope B Television C Watch D Bulb E Spectacles.

28. Study Figure 2 which shows an electric circuit having bulbs connected in a parallel form and answer the question that follows.

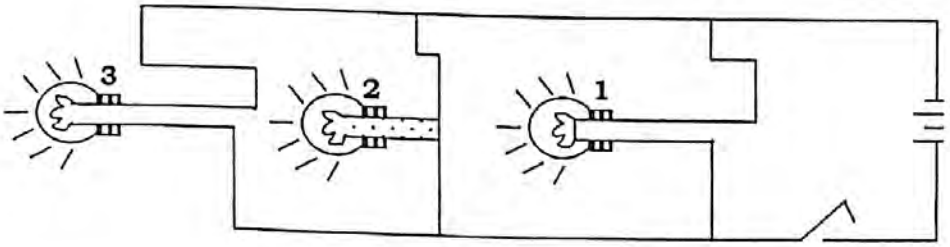


Figure 2

What will happen when bulb 2 blows? Bulb number

A 3 only will remain alight
B 1 and 3 will remain alight
C 1 only will remain alight
D 1 and 3 will blow
E 3 will blow.

29. Presence of living organisms, water and air is a characteristic of which of the following planets?

A Mars B Jupiter C Venus D Earth E Saturn.

30. The earth's axis is inclined at which degrees?

A 60 B 18½ C 32½ D 25½ E 23½.

31. Which of the following revolves around the earth from west to east?

A Sun B Star C Moon D Meteor E Planet.

32. A person having swollen neck gland (goitre) has a deficiency of which mineral salt?

A Calcium B Iodine C Potassium D Phosphorus E Limestone.

33. Carefully observe Figure 3 and answer the question that follows:

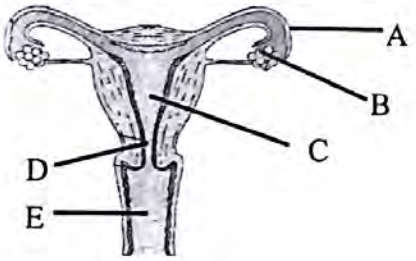


Figure 3

Which letter in Figure 3 represents the uterus?

A *C* B *D* C *E* D *A* E *B*.

34. One of the functions of the bones is to manufacture

A blood platelets B blood plasma C white blood cells
D red blood cells E blood clotting cells

35. Uhuru has a problem of having broken teeth and weak legs. What type of food nutrients would you advise him to eat in order to solve the problem?
A Iron minerals B Phosphorus minerals C Calcium minerals
D Iodine minerals E Vitamin K.

36. When Ahadi was asked a science question on solar eclipse, he thought for a while before giving the correct response to the teacher. Which part of the brain did he use to answer the question?
A The front brain B The hind brain
C The mid brain D The front and hind brain
E The mid and hind brain.

37. The function of the spinal cord in the human nervous system is to
A deal with involuntary actions
B deal with voluntary actions
C coordinate movement of the body
D maintain the shape of the body
E transport impulses to the central nervous system.

38. High tide and low tide in oceans and great lakes is caused by
A revolution of the earth around the sun
B rotation of the earth on its axis
C moon eclipse
D solar eclipse
E attraction force between the earth and the moon.

39. Under normal circumstances, rust is the result of a chemical reaction between
A copper, water and oxygen B sodium, water and oxygen
C calcium, water and oxygen D iron, oxygen and water
E water, oxygen and potassium.

40. Vegetables and fruits help in the formation of
A red blood cells B white blood cells C blood platelets
D blood plasma E bone marrow.

41. The following methods can be used for food preservation **except**
A baking B using honey C drying
D salting E using water.

42. The following are types of food nutrients **except**
A mineral salts B vitamins C water D protein E carbohydrates.

43. Which of the following foods can be preserved by deep freezing?
A Fruits and vegetables B Vegetables and grain
C Fish and fruit D Meat and fish
E Meat and grain.

44. The deficiency disease caused by lack of iron in the diet is
A rickets B kwashiorkor C anaemia D marasmus E beriberi.

45. Carefully observe the foods represented in Figure 4 and then answer the question that follows.

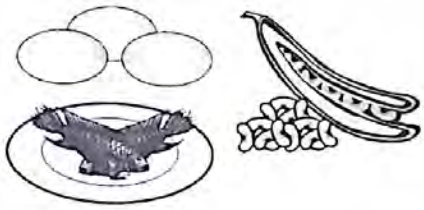


Figure 4

The function of the foods shown in Figure 4 is to
A build up the body
B give energy to the body
C protect the body
D generate heat to the body
E build up bones.

46. A fish which is in the water seems to be at the surface of the water while it is actually deep in the water because
A the fish is not stationary in the water
B the water is calm and clean
C the depth of water is reduced by the light rays
D fish scales make it appear big
E light rays are refracted in the water.

47. The correct food chain is
A eagle → grass → leopard → goat
B grass → eagle → leopard → goat
C leopard → eagle → grass → goat
D grass → goat → leopard → eagle
E eagle → leopard → goat → grass.

48. The three main parts of the circulatory system are
A arteries, veins and capillaries
B blood, heart and lungs
C blood, blood vessels and heart
D blood vessels, heart and valves
E heart, aorta and arteries.

49. Man uses the following sensory organs when doing scientific investigation:
A Tongue, eyes, nose, skin, ears
B Brain, nose, eyes, sensory nerves
C Brain, nose, ears, eyes, skin
D Brain, tongue, eyes, skin, ears
E Eyes, skin, ears, sensory nerves.

50. Which of the following hormones when insufficient cause defect in female reproductive system?
A Pituitary and insulin
B Estrogen and progesterone
C Thyroxine and pituitary
D Estrogen and insulin
E Thyroxine and estrogen.