

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

**05E**

**SCIENCE**

**Time: 1:30 Hours**

**Wednesday, 10<sup>th</sup> September 2014 a.m**

**Instructions**

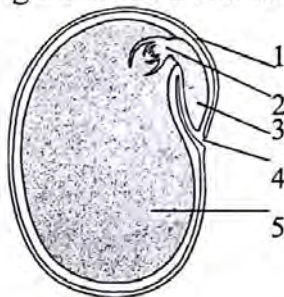
1. This paper consists of **fifty (50)** questions.
2. Answer **all** the questions.
3. Read all the given instructions in the **special answer sheet (OMR)** and fill in **all** the required information.
4. Write your **Examination Number** and then **shade the digits** of the number in the respective 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:  

<del>EA</del>	CB	CC	CD	CE
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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.

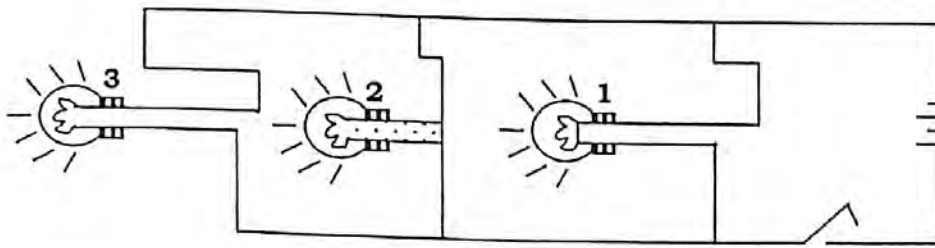


Figure 2

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  $18\frac{1}{2}$       C  $32\frac{1}{2}$       D  $25\frac{1}{2}$       E  $23\frac{1}{2}$ .
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:

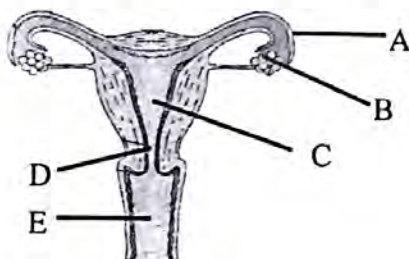


Figure 3

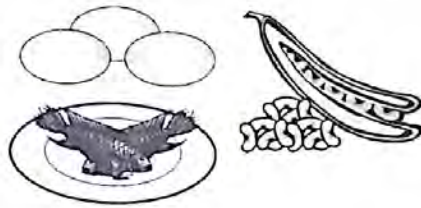
Which letter in Figure 3 represents the uterus?

- 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  
C protect the body  
E build up bones.
- B give energy to the body  
D generate heat to the body
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.