



001

DISCOVERY NATIONAL EXAMINATIONS

STANDARD SIX -YEAR 2021

SCIENCE

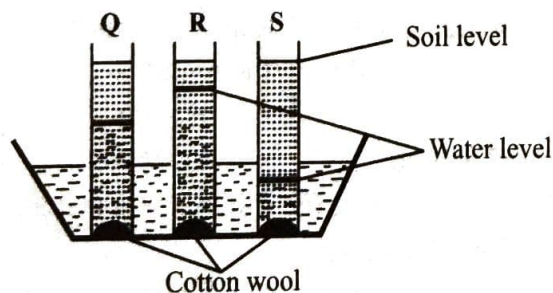
Time : 1 hour 40 minutes

1. The diagram below shows a human tooth.
The function of the tooth is;



- A. gripping and tearing.
 - B. tearing and grinding.
 - C. crushing and grinding
 - D. cutting and biting
2. Which one of the following is **not** a reason for lighting a house?
- A. To read comfortably
 - B. To feel warm
 - C. To avoid accident
 - D. To discourage pests
3. Which one of the following is **correctly** matched with its meaning in HIV/AIDS?
- A. Immune-lack of
 - B. Deficiency-many signs and symptoms
 - C. Acquired-get from
 - D. Syndrome-to be protected from

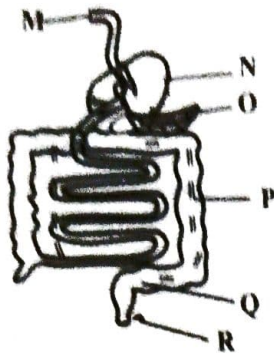
Use the diagram below to answer questions 4 and 5.



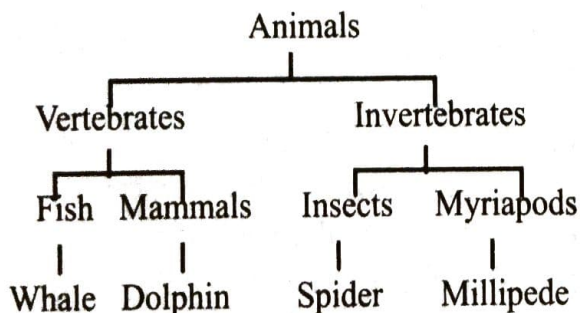
4. The above experiment was used to investigate;
- A. capillarity
 - B. water retention
 - C. drainage
 - D. water holding capacity.

5. The soil in the tube S is likely to be;
- A. loam
 - B. sand
 - C. clay
 - D. None
6. The third stage of HIV/AIDS infection is;
- A. symptomatic stage
 - B. asymptomatic stage
 - C. window stage
 - D. full-blown stage
7. The **best** method of controlling weeds is by;
- A. use of chemicals
 - B. uprooting
 - C. digging them out
 - D. slashing
8. STD five pupils in Shama Academy observed clouds with the following characteristics.
- i) were high in the sky.
 - ii) looked like bundles of cotton wool.
 - iii) had a flat base.
- The clouds they where observed were **likely** to be;
- A. nimbus
 - B. cumulus
 - C. stratus
 - D. cirrus
9. The loudness or softness of a sound is known as;
- A. pitch
 - B. loud sound
 - C. echo
 - D. volume
10. Which one of the following list of food crops consists of cereals only?
- A. Maize, millet, sorghum
 - B. Peas, beans, groundnuts
 - C. Kales, spinach, cabbage.
 - D. Irish potatoes, carrots, arrowroots.
11. The following are uses of water for recreation **except**;
- A. surfing
 - B. swimming
 - C. boat racing
 - D. making fountains

Use the diagram below to answer questions 12-14



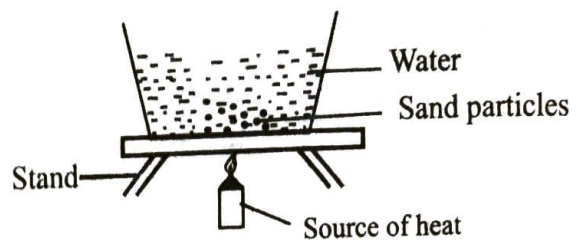
12. What is the function of part P in the digestive system above?
 - A. Digestion of food
 - B. Absorption of digested food
 - C. Storage of waste products
 - D. Absorption of water and mineral salts
13. Undigested food material is released from the body through part R this process is called;
 - A. egestion
 - B. excretion
 - C. digestion
 - D. absorption
14. The digestive juice produced at part N is used for digesting;
 - A. fats and oils.
 - B. starchy carbohydrates
 - C. proteins
 - D. vitamins
15. Which one of the following small animals is **not** likely to be found in the soil?
 - A. Earthworms
 - B. Butterfly
 - C. Termites
 - D. Cockroaches
16. Below is a classification table for animals



Which two animals are **wrongly** grouped?

- A. Whale and millipede
- B. Millipede and dolphin
- C. Dolphin and spider
- D. Whale and spider

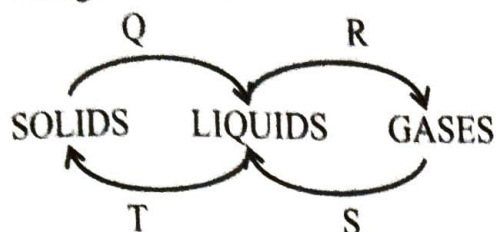
17. Which one of the following crops does **not** store food in the roots?
 - A. Onion
 - B. Cassava
 - C. Sweet potato
 - D. Carrot
18. Sound **does not** travel through;
 - A. gases
 - B. liquids
 - C. vacuum
 - D. solids
19. A boat made of metal floats on water because of;
 - A. material
 - B. size
 - C. shape
 - D. weight
20. STD 5 pupils in Njire Academy carried out the experiment below.



What were they investigating?

- A. Convection in liquids
- B. Conduction in liquids
- C. Conduction and radiation
- D. Convection in gases
21. Which one of the following plants are greens but does **not** produce flowers?
 - A. Maize
 - B. Grass
 - C. Moss
 - D. Cactus
22. Which deficiency disease below is caused by lack of iron?
 - A. Kashiakor
 - B. Anaemia
 - C. Rickets
 - D. Marasmus
23. Which one of the following **cannot** be seen at all during the night?
 - A. Stars
 - B. Sun
 - C. Cloud
 - D. Moon
24. Which one of the following is **not** a proper use of medicine?
 - A. Taking medicine whenever we feel unwell
 - B. Completing the dose
 - C. Taking the medicine only when prescribed by a doctor
 - D. Not taking medicine meant for another person

25. Which one of the following materials is a poor conductor of heat?
- A. Metallic spoon B. Sufuria
C. Iron nail D. Wooden spoon
26. The diagram below shows a summary of changes in states.



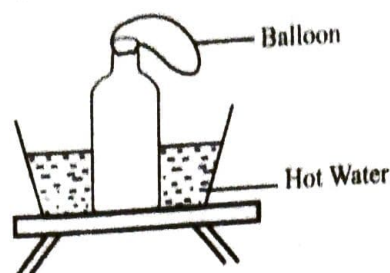
Which letters represents the processes that occur when objects are heated?

- A. Q R B. Q T
C. S T D. R S
27. The best soil for modeling also;
- A. is the best for farming.
B. contains a lot of humus
C. retains the highest amount of water
D. is known as the light soil.
28. The following are the descriptions of a certain components of a balanced diet
- i) *It is not digested in the body.*
ii) *It has no nutritive value.*
iii) *Helps to prevent constipation.*

The component described above is;

- A. minerals B. vitamins
C. protein D. roughage
29. Which one of the following statement is **not true** about gases?
- A. They expand most when heated
B. They have definite volume
C. They have definite mass
D. They occupy space
30. During breathing in, the lungs;
- A. collapse B. inflate
C. contract D. deflate
31. HIV/AIDS can be transmitted through the following body fluid **except**;
- A. urine B. blood
C. breast milk D. vaginal fluids

32. STD 5 pupils set an experiment below during their science lesson.



What were they investigating?

- A. Solids expand on heating
B. Liquids expand on heating
C. Air exerts pressure
D. Gases expand when heated
33. The following non-green plants are classified as harmful fungi **except**;
- A. dandruffs B. athlete's foot
C. toadstool D. ringworms
34. The windsock is usually painted with large black and white stripes **mainly** to;
- A. make it last longer
B. make it visible
C. make it beautiful
D. make it durable
35. The following are characters of amphibians **except**;
- A. they have scales
B. they have a moist skin
C. they have external fertilization.
D. they are cold blooded.
36. Heat transfer through solid is called;
- A. conduction.
B. radiation.
C. convection.
D. condensation.
37. Two std 7 boys Keter and Kibet were balancing on a see-saw. Keter is heavier than Kibet. For them to balance;
- A. Kibet should move closer to the pivot.
B. They should sit equal distance from the pivot.
C. Kibet should sit further from the pivot.
D. Keter should move further from the pivot.

38. Small quantities of mass are measured in unites called;

- A. tonnes.
- B. newtons
- C. kilograms
- D. grams

39. Which one of the following is **not** an example of oil crops?

- A. Coconut
- B. Cassava
- C. Sunflower
- D. Groundnuts

40. People working in noisy factories are provided with the following to protect themselves from noise **except**;

- A. ear muffs
- B. ear defenders
- C. ear buds.
- D. ear plugs

41. The animal drawn below moves by;



- A. crawling
- B. slithering
- C. walking
- D. gliding

42. Which one of the following is **not** a component of soil?

- A. Living organisms.
- B. Air
- C. Water
- D. Inorganic matter

43. The following are parts of the breathing system **except**;

- A. gullet
- B. nose
- C. lungs
- D. bronchioles

44. The diagram below shows a cooking pan



The **best** material for making part N is;

- A. aluminum
- B. iron
- C. hardened plastic
- D. any metal

45. The following are requirements during photosynthesis. Which one is **not**?

- A. Oxygen
- B. Water
- C. Mineral salt
- D. Sunlight

46. Which animal below provide us with mohair?

- A. Sheep
- B. Goat
- C. Donkey
- D. Rabbit

47. Which one of the following **does not** belong to the same state of matter as the other?

- A. Maize flour
- B. Oxygen
- C. Ice cubes
- D. Sand particles.

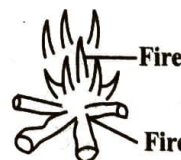
48. Which one of the following weeds has a strong unpleasant smell?

- A. Mexican marigold
- B. Black jack
- C. Wandering jew
- D. Thorn apple

49. The experiment below was carried out by pupils to investigate a method of heat transfer.



Pieces of paper



Fire

Firewood

They were investigating;

- A. convection currents in air
- B. heat transfer in radiation
- C. convection in liquids
- D. sinking and floating

50. A deaf or a dump person has-senses

- A.3
- B.5
- C.4
- D.2