

# DISCOVERY NATIONAL EXAMINATIONS

## STANDARD SEVEN -YEAR 2021

### SCIENCE

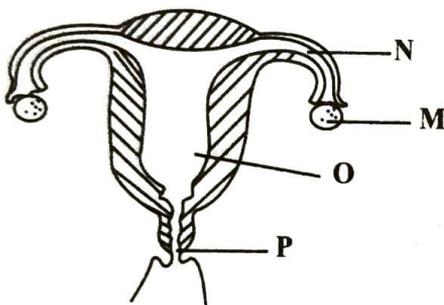
Time : 1 hour 40 minutes

1. Which one of the following type of soil erosion is characterised by small channels on sloping land?
  - A. Sheet erosion
  - B. Gulley erosion
  - C. Rill erosion
  - D. Splash erosion
2. The method of food preservation that works by making bacteria inactive is;
 

A. drying	B. canning
C. smoking	D. freezing
3. The brightest planet in the solar system is;
 

A. Mars	B. Mercury
C. Earth	D. Venus

Use the diagram below to answer questions 4 and 5.



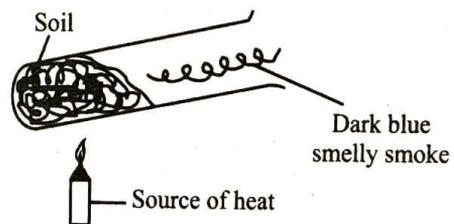
4. Fertilization takes place in the part labelled;
 

A. M	B. N
C. O	D. P
5. A mature ova is released from part M every 28 days through a process called;
 

A. menstruation	B. ovulation
C. fertilization	D. urination
6. The most refracted colour of the rainbow is;
 

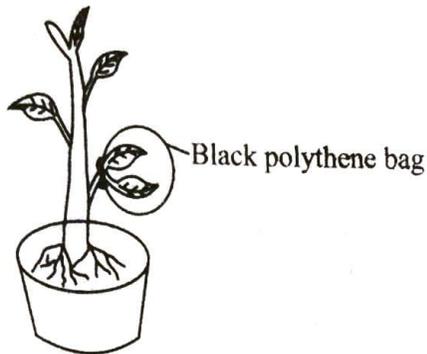
A. violet	B. red
C. indigo	D. orange

7. The following are methods of controlling soil erosion. Which one is **not**?
  - A. Contour ploughing
  - B. Planting cover crops
  - C. Digging along the slopes
  - D. Mulching
8. Which one of the following animal feeds is **not** classified as a concentrate?
  - A. Dairy meal
  - B. Silage
  - C. Sow and weaner
  - D. Growers mash
9. For a seed to germinate, the gas needed is;
  - A. Nitrogen
  - B. Carbon dioxide
  - C. Argon
  - D. Oxygen
10. The component of soil being investigated in the experiment below is;



- |                      |                   |
|----------------------|-------------------|
| A. water             | B. organic matter |
| C. mineral particles | D. air            |
11. Which one of the following water-borne diseases can be controlled by draining stagnant water?
    - A. Bilharzia
    - B. Typhoid
    - C. Cholera
    - D. Malaria

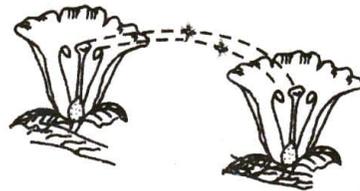
12. Which one of the following objects has a definite volume but no definite shape?
- A piece of chalk
  - Carbon dioxide
  - Kerosene
  - Sand
13. The experiment below was used to investigate a certain process in plants. The set-up was placed in the sunlight for a few days.



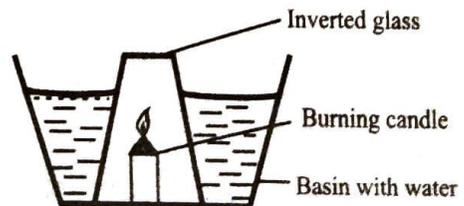
The process demonstrated above is;

- absorption in plants
  - photosynthesis in plants
  - transportation in plants
  - transpiration in plants
14. In which of the following objects will sound travel the slowest?
- |          |         |
|----------|---------|
| A. Metal | B. Wood |
| C. Water | D. Air  |
15. The following are signs and symptoms of a certain water-borne disease.
- Severe abdominal pains
  - Violent diarrhoea with mucus
  - Dehydration
- The disease can be prevented by;
- wearing protective clothing
  - draining stagnant water near the home
  - boiling drinking water
  - killing fresh water snails
16. Which one of the following mammals reproduces by laying eggs?
- Bat
  - Duck-billed platypus
  - Ostrich
  - Monkey

17. HIV/AIDS can be transmitted through the following ways **except**;
- sexual intercourse
  - sharing skin piercing tools
  - mosquito bites
  - mother-to child during delivery
18. The type of pollination shown in the diagram below is;



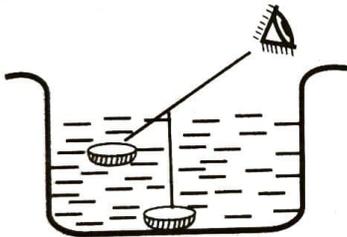
- insect pollination
  - cross pollination
  - self pollination
  - wind pollination
19. The type of food responsible for growth of new tissues and repair of worn-out body parts is;
- |             |                  |
|-------------|------------------|
| A. proteins | B. carbohydrates |
| C. vitamins | D. mineral salts |
20. Which one of the following is a use of water in the industries?
- Cooling machines
  - Cooking
  - Mixing acaricides
  - Boat riding
21. On which principle does a rain gauge work?
- Liquids occupies space
  - Liquids expands when heated and contract when cooled
  - Air in motion
  - Air is a mixture of gases
22. Std. 6 pupils did the experiment below.



All the following happens after some time

- except**;
- the candle goes off
  - water enters the glass

- C. water rises in the  
D. the level of water in the basin drops
23. What were the pupils **likely** to be investigating?  
A. Oxygen is used in burning  
B. Oxygen is needed during photosynthesis  
C. Air has mass  
D. Air expands
24. The smoothness or coldness of soil is known as;  
A. drainage  
B. capillarity  
C. water retention  
D. soil texture
25. Which one of the following crops is **not** a tuber?  
A. Cassava  
B. Greengrams  
C. Yams  
D. Sweet potatoes
26. Which one of the following parts of the male reproductive system is **wrongly** matched with its function?  
A. Testis - *Produce sperms*  
B. Spermduct - *Store sperms*  
C. Scrotum - *Regulate the temperature of the testis*  
D. Urethra - *allow the passage of sperms and urine outside the body*
27. Chrispine dropped a coin in water and it appeared raised as shown below.



- This is due to;  
A. splitting of the white light  
B. refraction of light  
C. reflection of light  
D. dispersion of light
28. The tendency of an object to remain in its state either moving or stationary is known as;  
A. motion  
B. gravity  
C. weight  
D. inertia

29. Who among the following children ate a balanced diet?  
A. Faith - *Termites, groundnuts, pork*  
B. Mary - *Beef, mutton, fish*  
C. Fidelis - *Ugali, green grams, kales*  
D. Alice - *Potatoes, matoke, cabbage*
30. The following are examples of rotational methods of grazing **except**;  
A. strip grazing  
B. paddocking  
C. tethering  
D. herding
31. The air we breathe in is cleaned in the;  
A. air sac  
B. nose  
C. bronchus  
D. mouth
32. Which one of the following boxes consists of body fluids through which HIV can be transmitted?  
A. Digestive juices  
Blood  
Semen  
B. Semen  
Saliva  
Blood  
C. Bile  
Breast milk  
Vaginal fluid  
D. Mucus  
Blood  
Urine
33. Which one of the following diseases is **not** included in the immunization schedule for infants?  
A. Tetanus  
B. Tuberculosis  
C. Malaria  
D. Measles
34. Which one of the following materials will allow some light to pass through but you cannot see through them clearly?  
A. Frosted glass  
B. Mirror  
C. Clean water  
D. Wood
35. The following are groups of cash crop **except**;  
A. beverage crops  
B. oil crops  
C. fibre crops  
D. tuber crops
36. Which one of the following is **not** a use of water in the body?  
A. Prevents the skin from drying  
B. Prevents constipation  
C. Keeps the body tissues soft  
D. Prevents the skin from drying

37. The diagram below shows a beam balance.



- It is used to:
- A. measure the weight of objects
  - B. measure force of different objects
  - C. compare mass of different objects
  - D. measure the volume of objects
38. The following are examples of legumes in livestock feeds **except**;
- A. nappier grass
  - B. lucerne
  - C. clovers
  - D. desmodium
39. Which one of the following weeds is used as a vegetable?
- A. Sodom apple
  - B. Oxalis
  - C. Wandering jew
  - D. Pigweed
40. Which one of the following cannot cause death in animals?
- A. Starvation
  - B. Being killed by other animals
  - C. Boredom
  - D. Old age
41. Which one of the following is an effect of HIV/AIDS to the nation?
- A. Congestion in hospitals
  - B. Low self-esteem
  - C. Loss of family income
  - D. Sadness in the family
42. The following are signs and symptoms of a certain communicable disease.
- i) *Rise in body temperature.*
  - ii) *Headache*
  - iii) *Pain in the joints*
  - iv) *Loss of appetite*
- The disease described above can be prevented through all the following ways **except**;
- A. drain stagnant water
  - B. covering all the surfaces of pools of water with oil
  - C. immunization
  - D. destroying empty containers

43. When a force is applied on an object, the following can happen **except**;
- A. make a stationary object start moving
  - B. change the state of an object
  - C. reduce the speed of a moving object
  - D. stop a moving object

44. Which method of weed control also conserves moisture?

- A. Use of chemicals
- B. Slashing
- C. Digging out
- D. Mulching

45. The following are characteristics of all animals **except** they;

- A. move from one place to another
- B. transpire
- C. remove waste
- D. reproduce

46. The problem related to teeth shown in the diagram below is called;



- A. dental cavities
- B. bad breath
- C. bleeding gums
- D. plaque

47. Which one of the following is **not** a characteristic of cumulus clouds?

- A. They are low in the sky
- B. They have a flat base
- C. They are white in colour
- D. They look like bundles of cotton wool

48. On a see-saw, a small boy can lift a big boy when;

- A. they sit on the same side
- B. the two boys move equal distance from the pivot
- C. the big boy moves closer to the pivot
- D. the big boy sits further from the pivot

49. The phase of the moon that **cannot** be seen at all is;

- A. full moon
- B. gibbous
- C. crescent
- D. new moon

50. Which animal below **does not** have a moist skin?

- A. Crocodile
- B. Frog
- C. Salamanda
- D. Toad