



STANDARD SEVEN

DISCOVERY
CENSOR

DISCOVERY NATIONAL EXAMINATIONS KCPE COMPLIANCE 2021

SCIENCE

Time: 1 hour 40 minutes

READ THESE INSTRUCTIONS CAREFULLY

1. You have been given this question booklet and a separate answer sheet. The question booklet contains 50 questions.
2. Do any necessary rough work in this booklet.
3. When you have chosen your answer, mark it on the **ANSWER SHEET**, not in this question booklet.

HOW TO USE THE ANSWER SHEET

4. Use only an ordinary pencil.
5. Make sure that you have written on the answer sheet:
YOUR INDEX NUMBER
YOUR NAME
NAME OF YOUR SCHOOL
6. By drawing a **dark line** inside the correct numbered boxes mark your full index number (i.e School Code Number and the three-figure Candidate's number) in the grid near the top of the answer sheet.
7. Do not make any mark outside the boxes.
8. Keep the answer sheet as clean as possible and **DO NOT FOLD IT**.
9. For each of the questions 1-50, answers are given. The answers are lettered A, B, C and D. In each case only **ONE** of the four answers is correct. Choose the correct answer.
10. On the answer sheet the correct answer is to be shown by drawing a **dark line** inside the box in which the letter you have chosen is written.

Example

In The Question Booklet

24. Animals that feed on plants **ONLY** are called _____.

- A. rodents
- B. omnivorous
- C. carnivores
- D. herbivorous

The correct answer is **D** on the answer sheet:

20 [A] [B] [C] [D] 21 [A] [B] [C] [D] 22 [A] [B] [C] [D] 23 [A] [B] [C] [D] 24 [A] [B] [C] [D]

11. Your **dark line** **MUST** be written in the box
12. For each question **ONLY ONE** box is to be marked in each set of four boxes.

This question paper consist of 8 printed pages

Discovery Educational Publishers. Nairobi

1. The following are stages of HIV infections.

- i) Symptomatic stage
- ii) Window period
- iii) Full brown AIDS
- iv) Asymptomatic stage

In which two stages are there no signs and symptoms?

- A. (iii), (iv)
- B. (i), (ii)
- C. (ii), (iv)
- D. (iii), (I)

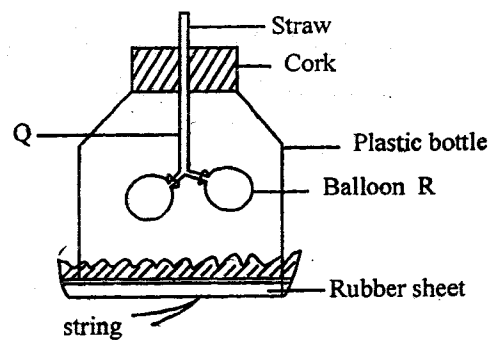
2. Which one of the following is an example of rotational grazing?

- A. Strip grazing
- B. Zero grazing
- C. Herding
- D. Stall feeding

3. Which one of the following equipments will a farmer use to give solid medicine to animals?

- A. Syringe
- B. Dosing gun
- C. Drenching gun
- D. Knapsack sprayer

The diagram below represents a model of the breathing system. Use it to answer questions 4 and 5.



4. Parts Q and R represents _____ and _____ respectively.

- A. trachea, lungs
- B. chest, diaphragm
- C. bronchus, lungs
- D. diaphragm, lungs

5. What would happen is the string is pulled downward?

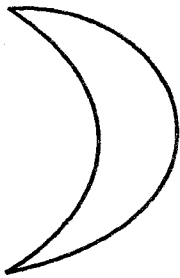
- A. The balloons will deflate
- B. Air goes out through part Q
- C. The rubber sheet moves up
- D. The balloons expand

6. The following are common properties between solids and liquids **except**;

- A. they have definite mass
- B. they have definite volume
- C. they change state when heated or cooled
- D. they have a definite shape

7. Animals that feed on remain of other animals are called;
- A. saprophytes
 - B. scavengers
 - C. predators
 - D. prey

8. The phase of the moon drawn below is called;



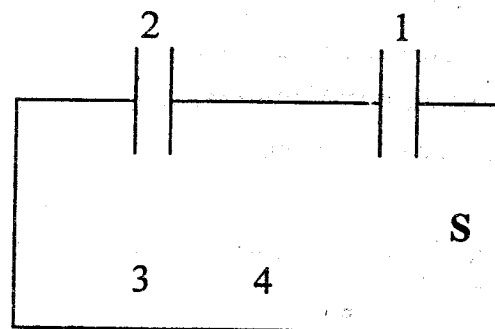
- A. gibbous
 - B. crescent
 - C. half moon
 - D. full moon
9. Cirrhosis is a disease of the liver which is caused by excessive;
- A. drinking of alcohol
 - B. smoking of tobacco
 - C. chewing of miraa
 - D. inhaling glue
10. The following are reasons why livestock should be fed on a balanced diet **except**;
- A. to maintain healthy growth
 - B. to make them grow faster than normal
 - C. to ensure maximum production of meat, milk and other products.
 - D. to produce healthy young one

11. Kamau has the problem of bad breath. The best advice you can give him is;
- A. to eat raw carrots in plenty
 - B. practice good oral hygiene
 - C. use a dental floss always
 - D. have his teeth removed

12. The malaria plasmodium usually affects the;
- A. red blood cells
 - B. plasma
 - C. white blood cells
 - D. platelets

13. Which one of the following is a common characteristic between fish and amphibians?
- A. they live partly in water and partly on land
 - B. Their bodies are covered with scales
 - C. They have moist skins
 - D. They have external fertilization

14. The convection box below was set up and used by std 5 pupil to demonstrate convection of heat in air.



If the candle was placed at S at what point did the pupil place the smoldering rag in order to get right results?

- A. 1
- B. 2
- C. 3
- D. 4

15. Which pair of foods below are the **main** sources of protective food?

- A. Meat and eggs
- B. Cereals and tubers
- C. Legumes and meat
- D. Fruits and vegetables

16. When preparing compost manure, top soil is added to the compost in order to;

- A. add nutrients to the compost
- B. quicken decomposition
- C. provide food for the bacteria
- D. introduce bacteria to the compost

17. Which one of the following practices would help in maintaining strong teeth in humans?

- A. Drinking milk
- B. Using toothpicks after meal
- C. Using teeth to break hard objects
- D. Eating a lot of cakes

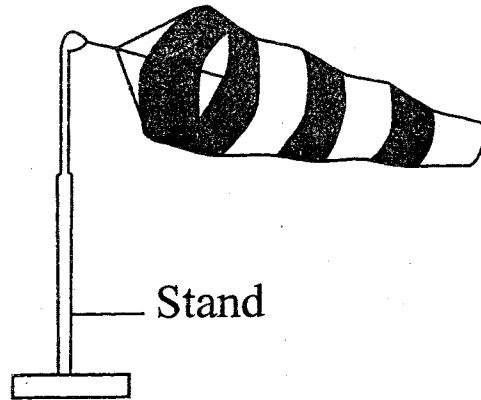
18. What is the **main** function of platelets in the body?

- A. Helps in transportation of oxygen
- B. It helps in clotting of blood
- C. Helps in fighting germs
- D. Transports digested food

19. A bean seed cannot germinate without;

- A. soil
- B. light
- C. oxygen
- D. carbon dioxide

20. The diagram below shows a weather instrument.



The **main** reason why it is painted with white and black strips is to;

- A. make it durable
- B. make it trap more wind
- C. make it more visible
- D. make it attractive

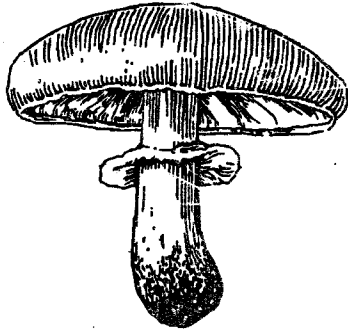
21. Which one of the following pairs shows the fourth and seventh planets respectively?

- A. Mars and Uranus
- B. Jupiter and Mars
- C. Venus and Saturn
- D. Uranus and Mars

22. Which one of the following conserved feed is cut and completely dried before storing it?
- Silage
 - Hay
 - Legumes
 - Pastures
23. During the process of digestion, water and mineral salts are absorbed in the;
- stomach
 - rectum
 - colon
 - small intestine
24. Which one of the following drugs is prohibited in Kenya?
- Tobacco
 - Bhang
 - Alcohol
 - Khat
25. The **most** appropriate method of controlling human intestinal worms is by;
- ensure regular deworming is done
 - ensuring proper sanitation
 - proper cooking of food
 - getting immunised
26. Which one of the following types of manure consist of animal faeces, urine and beddings?
- Compost manure
 - Green manure
 - Organic manure
 - Farmyard manure
27. The following are signs and symptoms of a certain water borne disease.
- Vomiting*
 - Violent diarrhoea with mucus*
 - Abdominal pains*
 - Dehydration*
- The disease described above is **likely** to be;
- typhoid
 - bilharzia
 - malaria
 - cholera
28. Which one of the following statements about HIV/AIDS is false?
- HIV destroys the body's immunity
 - You can tell if someone is HIV positive by just looking at them
 - Some people who are HIV positive look healthy
 - AIDS has no cure
29. The **best** place to put a raingauge is;
- inside a weather house
 - under the shade
 - on level open ground
 - under a roof
30. Nutritional deficiency diseases can be prevented by;
- eating a balanced diet
 - washing food eaten raw
 - proper sanitation
 - immunisation

31. The transfer of heat through gases and liquids is called;
- radiation and convection
 - convection
 - conduction
 - conduction and convection

32. The plant drawn below is classified as;



- green-flowering plant
 - non-green plant
 - flowering plant
 - green non-flowering plant
33. Greasing and oiling is a way of maintaining tools that;
- that have sharp cutting edge
 - have wooden handle
 - have metal parts and those that are moveable
 - are used for cutting
34. Which one of the following is **wrongly** matched with the type of materials?
- Transparent; - *air, clean water, window pane*
 - Translucent - *skylights, frosted glass, oiled paper*
 - Opaque:- *Mirror, wall, cardboard*
 - Translucent:- *Water, air, curtain*

35. Which one of the following groups consists of animals that belong to the same group?

A.

Newt
Lizard
Shark

B.

Frog
Toad
Newt

C.

Snake
newt
Turtle

D.

Trout
Dolphin
Whale

36. The following are examples of legumes. Which one is **not**?
- Nandi setana grass
 - Cloves
 - Glycine
 - Lucern
37. We are able to see images in a mirror because of;
- bending of light
 - reflection of light
 - refraction of light
 - splitting of the white light
38. Which one of the following is **not** a characteristic of insect pollinated flowers?
- Have brightly coloured petals
 - Produce nectar
 - Produce heavy and sticky pollen grains
 - Produce numerous pollen grains

39. Which one of the following body fluids is **not** likely to transmit HIV/AIDS?

- A. Blood
- B. Saliva
- C. Urine
- D. Breast milk

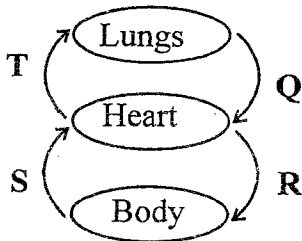
40. Bile juice is produced by the liver and stored in the gall bladder. It is used to;

- A. complete the digestion process
- B. break down fats and oils
- C. digest proteins
- D. digest starchy carbohydrates

41. Which one of the following objects has no definite volume?

- A. Water
- B. Stone
- C. Water vapour
- D. Block of wood

42. The diagram below shows a simplified circulatory system.



Which two blood vessels carry oxygenated blood?

- A. Q, R
- B. S, T
- C. Q, T
- D. R, S

43. In which part of the breathing system is air warmed, cleaned and moistened?

- A. Mouth
- B. Lungs
- C. Nose
- D. Bronchus

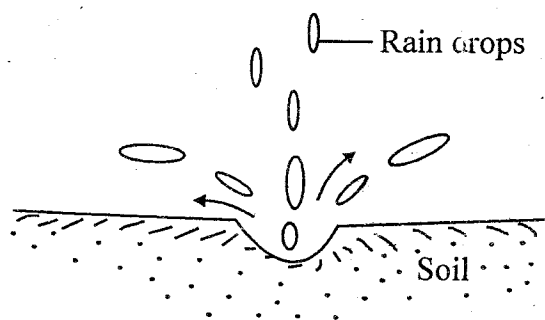
44. Noise pollution can lead to all the following **except**;

- A. temporary deafness
- B. madness
- C. loss of concentration
- D. irritation

45. Which one of the following statements is **true** about planets?

- A. They do not produce their own light
- B. They are bigger than stars
- C. They twinkle
- D. They do not revolve around the sun

46. The diagram below shows a type of soil erosion.



It is called;

- A. rill erosion
- B. gulley erosion
- C. sheet erosion
- D. splash erosion

47. Where does the germination of pollen grains take place?
- A. Style
 - B. Stigma
 - C. Ovary
 - D. Anthers
48. Which one of the following crops is not a cereal?
- A. Barley
 - B. Wheat
 - C. Millet
 - D. Green grams
49. Sound energy travels the poorest through the;
- A. vacuum
 - B. gases
 - C. liquids
 - D. solids
50. The best method of controlling malaria is by;
- A. sleeping under treated mosquito nets
 - B. drinking boiled water
 - C. destroying the breeding places of the mosquitoes
 - D. seeking for treatment