

K.C.P.E SIXTH TRIAL STANDARD EIGHT 2021

SCIENCE

Time: 1hr 40mins

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 the question booklet.

HOW TO USE THE ANSWER SHEET

4. Use 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 marks outside the boxes.
8. Keep your answer sheet as clean as possible and do not fold it.
9. For each of the Questions 1 – 50, four 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:

14. Which one of the following is the **COMMONLY** abused drug in Kenya?

- A. Tobacco
- B. Miraa
- C. Alcohol
- D. Tea

The correct answer is C (Alcohol)

On the answer sheet:

4 A B C D 14 A B C D 24 A B C D 34 A B C D 44 A B C D

In the second set, the box with the letter C printed in it is marked.

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

This question paper consists of 7 printed pages

Candidates should check the question paper to ensure that all the pages are printed as indicated and no questions are missing

1. The fusion of reproductive cells in plants takes place in the
 - A. ovary
 - B. ovules
 - C. anthers
 - D. stigma

2. When investigating germination of seeds, cottonwool, oil and water was used. The **MAIN** purpose of using cottonwool is to
 - A. improve air circulation.
 - B. keep the seeds moist.
 - C. hold the seeds together.
 - D. maintain the right temperature.

3. Which one of the following pair consists of cereals **ONLY**?
 - A. Maize and beans
 - B. Greengrams and cowpeas
 - C. Millet and sorghum
 - D. Rice and groundnut

4. Which one of the following is the function of **ALL** stems?
 - A. Manufacture of food.
 - B. Transportation of food.
 - C. Absorption of water.
 - D. Exchange of gases.

5. The crop pest shown below **MAINLY** attack



- A. leaves
- B. grains
- C. stem
- D. tubers

6. Which one of the following activities will make iron sheet to float on water?
 - A. Making holes on the sheet.
 - B. Changing its size.
 - C. Changing its shape.
 - D. Reducing amount of water.

7. Which one of the following substances have the same state of matter?
 - A. Water and ice
 - B. Powdered chalk and salt
 - C. Candle wax and spirit
 - D. Glue and water vapour

8. The processes of changing water vapour into ice are
 - A. melting and evaporation
 - B. freezing and melting
 - C. evaporation and condensation
 - D. condensation and freezing

9. Which one of the following components of air is **CORRECTLY** matched to its percentage?

	Carbondioxide	Oxygen
A.	0.03	0.97
B.	78	0.03
C.	0.03	21
D.	21	78

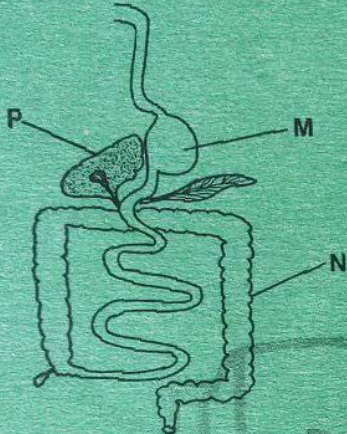
10. An insoluble solid can be separated from a liquid by
 - A. winnowing
 - B. sieving
 - C. decanting
 - D. use of magnet

11. Which one of the following pairs of heart chambers receive oxygenated blood?
 - A. Left auricle and left ventricle
 - B. Right auricle and right ventricle
 - C. Left auricle and right auricle
 - D. right ventricle and left ventricle

12. During inhalation, the following occurs **EXCEPT**

- A. pressure in the chest cavity increases.
- B. ribs move upwards and outwards.
- C. diaphragm flattens.
- D. lungs become inflated.

13. The diagram below shows the human digestive system.



The following activities occurs in part labelled **M EXCEPT**

- A. killing of germs.
- B. absorption of mineral salts.
- C. secretion of digestive juice.
- D. digestion of food.

14. Which one of the following waste products is excreted by the skin?

- A. Excess water
- B. Urine
- C. Excess fat
- D. Carbon dioxide

15. In the uterus, embryo develops into

- A. zygote
- B. sex cell
- C. placenta
- D. foetus

16. Which one of the following animal has mammary glands and lays eggs?

- A. Crocodile
- B. Platypus
- C. Whale
- D. Bat

17. Which one of the following animals has the same number of legs as a grasshopper?

- A. Crab
- B. Scorpion
- C. Weevil
- D. Tick

18. The diagram below represents a foot of a certain bird.



The bird shown has beak which is

- A. short and strong
- B. strong and curved
- C. strong and serrated
- D. slender and long

19. Which one of the following methods of controlling livestock parasites will **BEST** control ticks and fleas?

- A. Deworming.
- B. Dipping
- C. Hand-picking
- D. Proper sanitation

20. The following are adaptations of animals to movement. Which one is for flying and swimming?

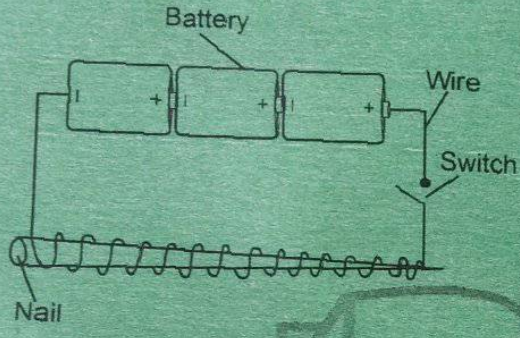
- A. Have scales.
- B. Strong hind legs.
- C. Streamlined body.
- D. Carnassial teeth.

21. Two inflated balloons were rubbed using a piece of cloth. They were then brought close to each other. The balloons

- A. repelled.
- B. neither repelled nor attracted.
- C. bursted.
- D. attracted.

22. Which one of the following is a safety measure against lightning when it is raining?
- Avoid holding metallic objects.
 - Sheltering under a tree.
 - Avoiding overloading sockets.
 - Using an umbrella when in an open field.

3. The set up shown below represents a circuit that can be used to make an electromagnet.



The energy transformation that occurs at the nail is

- Chemical → magnetic
- electrical → magnetic
- heat → light
- chemical → electrical

Transfer of heat by radiation take place in

- solid
- gases
- vacuum
- liquids

The following are sources of chemical energy EXCEPT

- bicycle dynamo
- car battery
- charcoal
- food

Which one of the following is a use of heat energy?

- Discouraging pests.
- Drying clothes.
- Taking photograph.
- Comfort reading.

27. Salting helps in preserving meat by
- softening the meat.
 - coating to keep off air and bacteria.
 - improving the taste of the meat.
 - removing water from the meat.

28. Which one of the following diseases is caused by lack of protective foods and minerals?
- Marasmus
 - Anaemia
 - Ricket
 - Kwashiokor

29. Which one of the following is the BEST way a lactating mother can boost immunity of the infant?
- Regular breast feeding of an infant.
 - Providing the infant with balanced diet.
 - Providing food rich in calcium and phosphorus.
 - Feeding the infants with fruits and vegetables.

30. The chart below represents a weather record for five days.

DAY	MORNING	AFTERNOON
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		

Key

Sunny	Cloudy	Calm	Windy	Rainy

Which one of the following statement about the weather chart is CORRECT? Whenever it was

- rainy in the morning it was sunny in the afternoon.
- sunny it was windy.
- cloudy in the morning it rained in the afternoon.
- windy it rained.

31. Which **TWO** weather instruments are used to show direction of wind?

- A. Windvane and liquid thermometer
- B. Windsock and rain gauge
- C. Windvane and air thermometer
- D. Windsock and windvane

32. The cloud that appears low in the sky

- A. has a flat base.
- B. indicates fine weather.
- C. is mountainous in shape.
- D. appears like bundle of cotton.

33. Below is an illustration of a farm tool.



The **BEST** way of maintaining the simple tool shown is by

- A. oiling metallic parts.
- B. sharpening handles.
- C. safe keeping.
- D. greasing movable parts.

34. Leshao who is heavier than Betty balanced on a seesaw during a P.E lesson. In order Betty to balance Leshao she should

- A. move fulcrum close to herself.
- B. stand on the same position.
- C. move nearer the fulcrum.
- D. move fulcrum closer to Leshao.

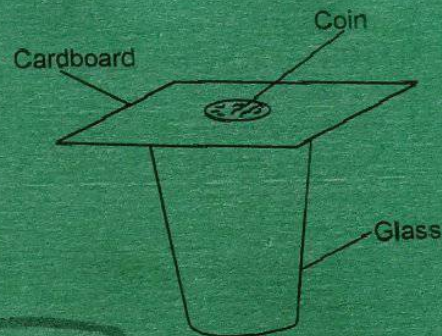
35. Which one of the following simple tool has load between the fulcrum and the effort?

- A. Crowbar
- B. Claw hammer
- C. Wheelbarrow
- D. Spade

36. Which one of the following activities is opposing force a disadvantage?

- A. Braking a bicycle on a road.
- B. Lighting a matchbox.
- C. Skating on ice.
- D. Increasing effort required to do a task.

37. During a science lesson, pupils set up the experiment shown below.



When the card was pulled away abruptly, the coin falls inside the glass. This was due to

- A. gravity of the coin.
- B. inertia of rest.
- C. weight of the coin.
- D. inertia of motion.

38. Which one of the following soil nutrients is needed by the soil in large quantities?

- A. Manganese
- B. Nitrogen
- C. Boron
- D. Zinc

39. Which one of the following is **TRUE** about sand soil?

- A. Small air spaces.
- B. Best in capillarity.
- C. Cracks when dry.
- D. Poor water retention.

40. A farmer noticed a uniform layer of the piece of land missing in his farm and taken to another part by water. This type of experience could be
- gully erosion.
 - sheet erosion.
 - rill erosion.
 - splash erosion.
41. Which one of the following forms the **MAJOR** non living things of environment?
- Air and soil
 - Plants and water
 - Buildings and light
 - plants and animals
42. Which one of the following practices will lead to soil pollution?
- Burning charcoal in a closed room.
 - Disposing of animal waste in the farm.
 - Burying plastic materials in the soil.
 - Use of organic fertilizers.
43. Which one of the following is an effect of HIV and AIDS to the nation?
- Poor health.
 - Loss of income.
 - Increase number of orphans.
 - Poor economy.
44. Which one of the following shows proper use of medicine?
- Labelling all medicine containers.
 - Avoid use of soda bottles to store medicines.
 - Using locable kits to store medicine.
 - Checking expiry date when taking medicine.
45. The following are effects of abusing drugs.
- Impaired judgements
 - Drug induced accidents.
 - School dropout.
 - Loss of consciousness
 - Truancy
- Which one are **ALL** social effects of drugs?
- (i) and (iv)
 - (ii) and (v)
 - (i) and (v)
 - (iii) and (iv)
46. Which one of the following is **NOT** a sign of gonorrhoea?
- Yellowish discharge
 - Pain during urination
 - Infertility
 - Painless sore
47. Which one of the following is a **COMMON** communicable disease?
- Typhoid
 - Marasmus
 - Malaria
 - Tetanus
48. Which one of the following is a use of water in the industry?
- Washing farm input.
 - Skiing
 - Making fountain
 - Boat racing

49. Recycling is a way of conserving water. Which one of the following statements describes recycling?

- A. Using drip irrigation
- B. Storing water in dam.
- C. Harvesting rain water.
- D. Treating sewage water.

50. Which one of the following statements about water is **TRUE**?

- A. is a good conductor of electricity.
- B. has definite shape.
- C. mixes with all liquids.
- D. is a good conductor of heat.

