

THE FINAL CURVE

K.C.P.E TRIAL -2020

-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 the question paper.

HOW TO USE THE ANSWER SHEET.

4. Use an ordinary pencil only.
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 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, D. In each case only **ONE** of the four answers is correct. Choose the correct answer.
10. On the answer sheet show the correct answer 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 **not** a controlled method of grazing?
- A. Zero grazing.
 - B. Strip grazing.
 - C. Herding.
 - D. Tethering.

The correct answer is C.

On the Answer sheet:

14. [A] [B] [C] [D]

15. [A] [B] [C] [D]

16. [A] [B] [C] [D]

17. [A] [B] [C] [D]

In the set of boxes number 14, the box with 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 8 printed pages.

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TURN OVER

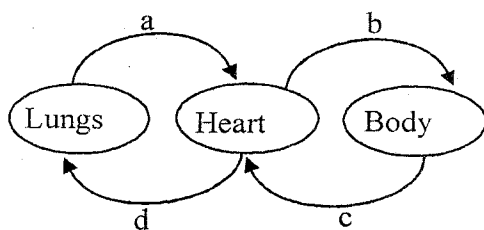
- Which one of the following is **not** a function of blood in the human body?
 - Transportation of digested food from the ileum to body parts
 - Transportation of heat from the liver to all body parts
 - Transportation of food from the mouth to the stomach
 - Transportation of hormones from glands to where they are needed

- Which one of the following is a social effect of drug abuse?
 - Poor health
 - Loss of consciousness
 - Lack of concentration
 - Marital conflicts

- Which one of the following is **not** an importance of plants in the environment?
 - They are home for all animals
 - They cover the soil and prevent soil erosion
 - They form good catchment areas for rainfall
 - They provide food for animals

- Excessive chewing of miraa leads to
 - lung cancer
 - difficulty in breathing
 - addiction
 - a false feeling of well being to the user

- Study the diagram below and answer the question that follows.



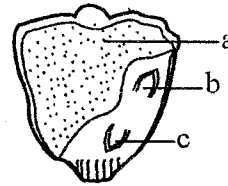
Which two blood vessels carry oxygenated blood?

- a and b
- c and d
- d and a
- b and c

- Which type of irrigation is the **best** in conserving water?

- Drip irrigation
- Sprinkler irrigation
- Basin irrigation
- Flood irrigation

- The diagram below shows a monocot seed



Name the parts labelled a, b and c respectively

- endosperm, plumule, radicle
- radicle, plumule, testa
- cotyledon, plumule, radicle
- testa, radicle, plumule

- The organisms below are members of a food chain; **antelope, grass, vulture, and leopard.**

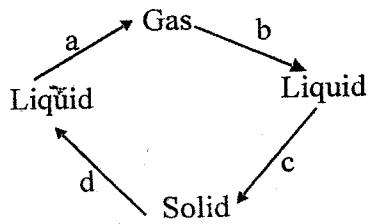
Arrange them in the correct food sequence

- Grass → antelope → leopard → vulture
- Antelope → grass → leopard → vulture
- Vulture → leopard → grass → antelope
- Grass → leopard → antelope → vulture

- Trees growing on a piece of land, control soil erosion by

- holding the soil firmly
- increasing amount of rainfall
- slowing the speed of rain water
- changing the speed of wind

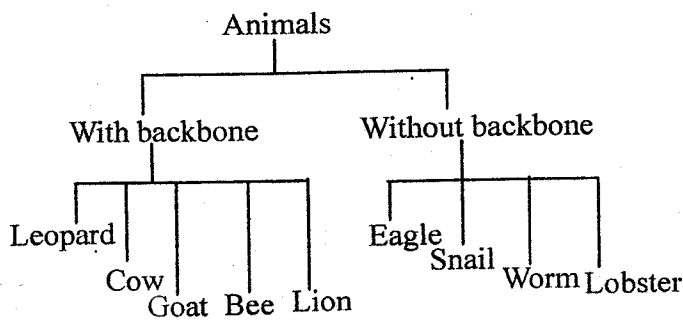
10. The diagram below shows processes a, b, c and d, which bring about change of state in matter.



Which two processes will require an increase and decrease in temperature respectively?

- | | Increase | Decrease |
|----|----------|----------|
| A. | a | b |
| B. | c | d |
| C. | c | a |
| D. | d | a |

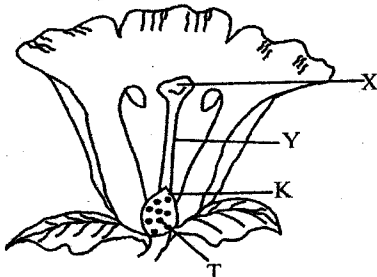
11. The following is a classification of animals



Which two animals are wrongly classified?

- A. A bee and eagle
 B. A lion and lobster
 C. A goat and leopard
 D. A lion and a cow

12. The diagram below shows a flower



Name the parts labelled X, Y, K and T respectively

- A. Stigma, style, ovary, ovules
 B. Style, anthers, filament, ovules
 C. Filament, ovary, ovules, style
 D. Stigma, ovary, style, ovules

13. Plants like passion fruits have tendrils. These are used for
- A. trapping insects
 B. attaching onto other plants and climbing them
 C. taking nutrients from the plants they climb
 D. absorbing nutrients from the soil

14. The following shows the stages in the digestion of food

K → Y → Small intestines →

large intestines → rectum → anus

Name the digestive juices produced at parts

K and Y respectively

- A. Saliva, hydrochloric acid
 B. Gastric juice, saliva
 C. Pancreatic juice, bile
 D. Gastric juice, pancreatic juice

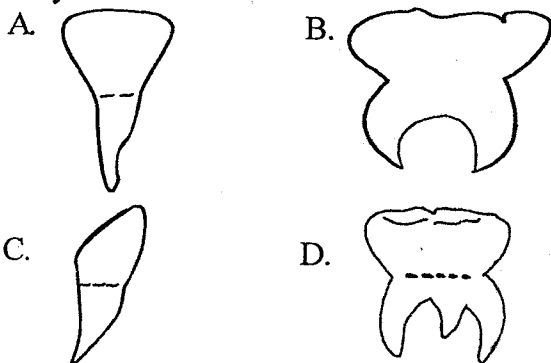
15. Which one of the following shows the path taken by carbon dioxide from the lungs to the outside of the body?

- A. Air sacs → bronchi → trachea → mouth → bronchioles
 B. Nose → windpipe → bronchi → bronchide → airsacs
 C. Air sacs → bronchioles → bronchi → trachea → lungs
 D. Air sacs → bronchioles → bronchi → trachea → nose

16. Which one of the following pairs of foods can both be preserved by drying?

- A. Milk and fish
 B. Fish and grains
 C. Fish and tomatoes
 D. Tomatoes and tea leaves

17. Which one of the following types of teeth is the first to grow and to be shed off in a baby?



18. Which one of the following pairs of plants does **not** have fibrous roots?

- A. Maize, Millet
- B. Sorghum, Barley
- C. French beans, Sun flower
- D. Maize, Sorghum

19. The characteristics below are of a certain group of animals

- (i) They lay eggs
- (ii) They are cold blooded
- (iii) Their bodies are covered with dry scales
- (iv) They breathe through the lungs

Which group of animals among the following have these characteristics?

<p>A</p> <p>Snakes</p> <p>Lizards</p> <p>Crocodile</p> <p>Turtle</p>	<p>B</p> <p>Monkey</p> <p>Eagle</p> <p>Snake</p> <p>Apes</p>
<p>C</p> <p>Turtles</p> <p>Lizard</p> <p>Chameleon</p> <p>Frog</p>	<p>D</p> <p>Chameleon</p> <p>Cobra</p> <p>Tortoise</p> <p>Ape</p>

20. Which of the following methods would be used to separate a mixture of salt, sand and iron fillings?

- A. Magnetic → dissolving → filtration → evaporation
- B. Picking → magnetic → filtration → evaporation
- C. Picking → dissolving → filtration → evaporation
- D. Dissolving → filtration → magnetic → evaporation

21. Std seven pupils at Sukari Academy had the following materials

- (i) scale
- (ii) thread
- (iii) thin walled bottle
- (iv) wooden stand
- (v) coloured water
- (vi) glass tube

Which weather instrument did they construct?

- A. Barometer
- B. Air thermometer
- C. Hygrometer
- D. Anemometer

22. Which one of the following properties of clay soil, **mainly** leads to flooding in an area?

- A. Poor drainage
- B. High capillarity
- C. Fine texture
- D. Colour of the soil particles

23. A child had the following signs and symptoms

- (i) ran out of breath very easily
- (ii) had white palms and nails
- (iii) had a pale face and white eye balls
- (iv) looked very weak

Which of the following nutrients was the child lacking?

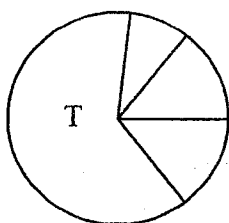
- A. Iron
- B. Calcium
- C. Vitamin D
- D. Proteins

24. In which stage of HIV and AIDs development is one attacked by opportunistic diseases?

- A. Window
- B. Incubation
- C. Full blown
- D. Symptomatic

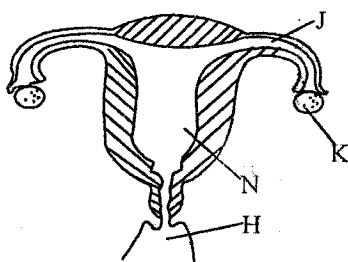
28. Which one of the following pairs of liquids are immiscible?
- Paraffin and diesel
 - Paraffin and motor oil
 - Engine oil and petrol
 - Methylated spirit and paraffin

29. The pie chart below represents the composition of air



The gas represented by letter T is

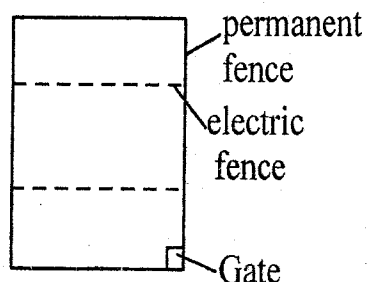
- useful during combustion
 - used in making light bulbs
 - used during rusting
 - used in making proteins by legumes
30. The diagram below represents the female reproductive system



Which one of the following parts is **wrongly** matched with its function?

- J - where fertilization occurs
- K - produces ovum
- J - has muscles which help during giving birth
- H - passage of the baby during parturition

31. Which statement among the following is **incorrect** about the method of grazing shown below?



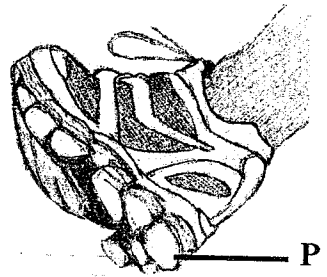
- The pasture is subdivided using temporary fences into strips
 - The pasture is usually of high quality
 - The livestock are allowed to graze in one strip at a time
 - The animal is tied with a rope to a peg
32. A patient had the following signs and symptoms
- severe headache and body pains
 - high body temperature
 - fever
 - severe diarrhoea with blood stains
 - The patient had skin rashes
 - the patient had abdominal pains
- The patient was likely to be suffering from
- Typhoid
 - Cholera
 - Malaria
 - Bilharzia
33. The table below shows the immunization schedule for infants

Age	Disease immunised against	Vaccine
At birth	•Poliomyelitis •Tuberculosis	•K •BCG
6 weeks	•Poliomyelitis •Diphtheria •Whooping cough •Tetanus	•Anti-polio •X

The vaccines represented by letters K and X respectively are

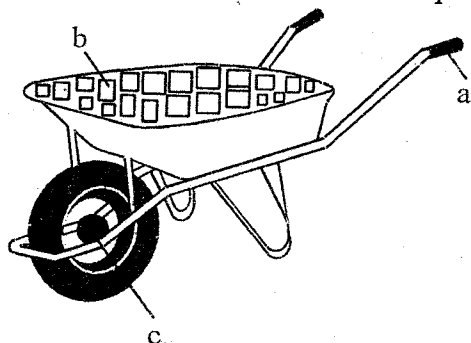
- Anti - polio and DPT
- DPT and anti-polio
- BCG and DPT
- Anti -measles and BCG

34. The main function of the parts marked P on the diagram below is



- A. they help to increase friction when one is walking
- B. they help in reducing friction when one is walking
- C. they help in making the shoe expensive
- D. they help the person having them slide on wet grounds

35. The diagram below shows a simple machine



Name the positions marked a, b and c respectively

- | a | b | c |
|------------|---------|---------|
| A. effort | load | fulcrum |
| B. load | effort | fulcrum |
| C. fulcrum | load | effort |
| D. load | fulcrum | effort |

36. Which group among the following contains good conductors or electricity only?

A. Silver Copper Bronze	B. Zinc Tin Chalk
C. Lead Water Rubber	D. Air Paper Lead

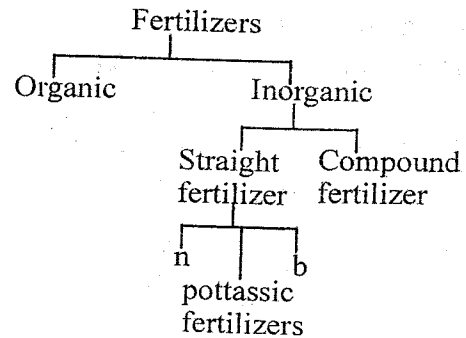
37. Steven felt cold and decided to warm his hands as shown in the diagram below



The heat reached his hands through the process of

- A. radiation
- B. currents
- C. convection
- D. conduction

38. Study the structure below and answer the question that follows



Name the fertilizers represented by letters l and n

- A. Nitrogenous fertilizers and phosphatic fertilizers
- B. Compost manure and farmyard manures
- C. Nitrates and compost manure
- D. Green manure and phosphatic fertilizers

39. Which one of the following is the main reason why farmers apply mulch?

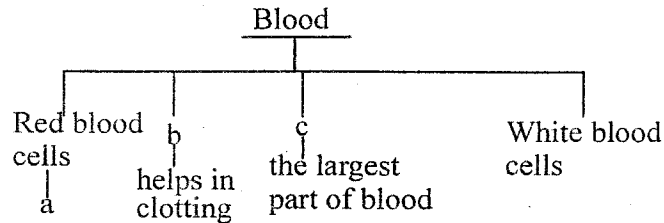
- A. To control soil erosion
- B. To control feeds
- C. To control pests
- D. To conserve moisture

40. All the following are methods of controlling human intestinal worms **except**

- A. proper washing of foods that are eaten raw
- B. proper cooking of foods
- C. proper sanitation
- D. irregular deworming

41. External parasites attack all the following parts of an animal **except**
- combs
 - wattles
 - base of the horn
 - heart

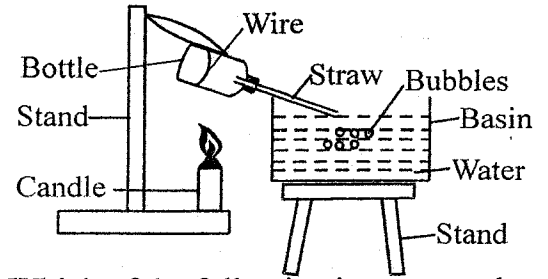
42. Use the chart given below to answer the question that follows



Which one of the following can **correctly** fit at points **b** and **c** respectively?

- Platelets and plasma
 - Plasma and platelets
 - Plasma and veins
 - Plasma and platelets
43. Which of the following materials is opaque?
- Oiled piece of paper
 - A sheet of white paper
 - Dark coloured polythene paper
 - Dark plastic materials
44. Which of the following correctly represents the 3rd, 6th and 7th planets from the sun respectively?
- Earth, Mars and Jupiter
 - Venus, Jupiter and Uranus
 - Mars, Jupiter and Neptune
 - Earth, Saturn and Uranus
45. Which one of the following is a characteristic of an insect pollinated flower?
- The anthers are large and loosely attached to the filament
 - They have long stigmas that hang out of the petals
 - They produce abundant light powdery and smooth pollen grains
 - The petals are usually big and bright in colour

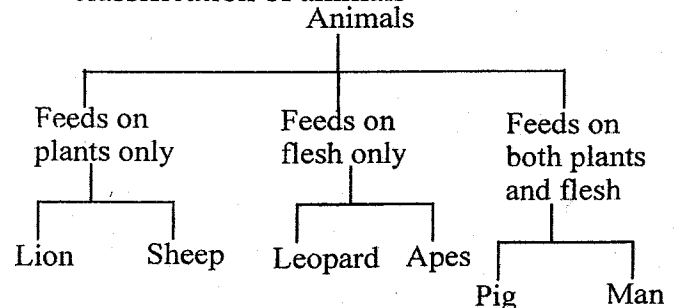
46. The diagram below was used to investigate the effect of heat on matter



Which of the following is **not** true about the observation that was made when the candle was put off?

- The volume of water in the basin decreased
 - The volume of water in the basin increased
 - Water started rising in the straw
 - The bubbles stopped coming out
47. Which one of the following is **not** a change that occurs in adolescence?
- The skin colour changes
 - Appearance of pimples
 - Deepening of the voice
 - Increase in weight and height
48. The following are characteristics of amphibians **except**
- they have moist skin with no scales
 - they are warm blooded
 - they are cold blooded
 - adult amphibians breathe through the lungs on land
49. Which group among the following contains green but non-flowering plants?
- Moss, pine, cedar
 - Millet, moulds, yeast
 - Cypress, ferns, peas
 - Puffball, yeast, mushroom

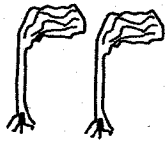





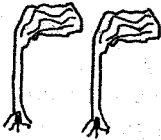

50. The chart below shows a simplified classification of animals



Which two animals are **wrongly** classified?

- Lion and Apes
- Sheep and Pig
- Man and Sheep
- Lion and man

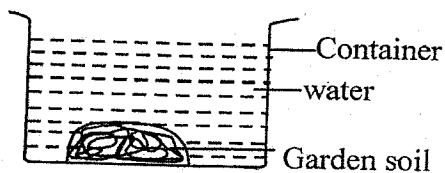
25. The chart below shows a weather record kept by standard six pupils for four days.

Day	Morning	Afternoon
Monday		
Tuesday		
Wednesday		
Thursday		

Which was the **best** day for winnowing and moving a wind mill?

- A. Thursday
- B. Wednesday
- C. Monday
- D. Tuesday

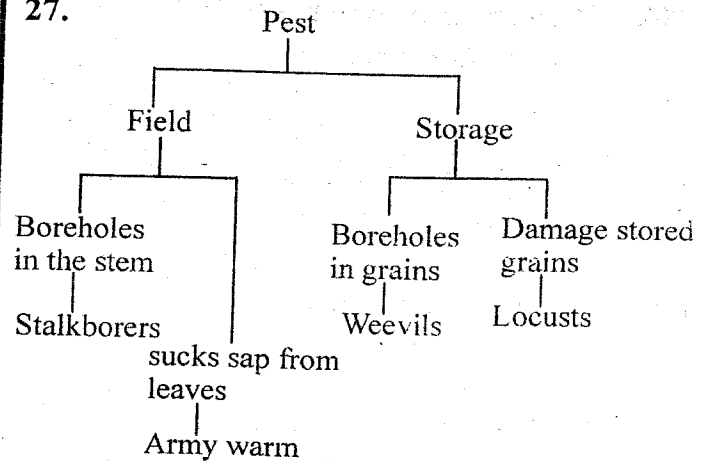
26. The experiment shown below was set-up to investigate a certain component of soil.



Which one of the following was **not** an observation made in the set up?

- A. Bubbles were produced
- B. No bubbles were seen
- C. The level of water in the basin went down after sometime
- D. Bubbles stopped coming out after some- time

27.



Which two pests are wrongly classified?

- A. Stalkborers and army worms
- B. Weevils and locusts
- C. Army worms and locusts
- D. Stalkborers and weevils