

K.C.P.E EIGHTH 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.

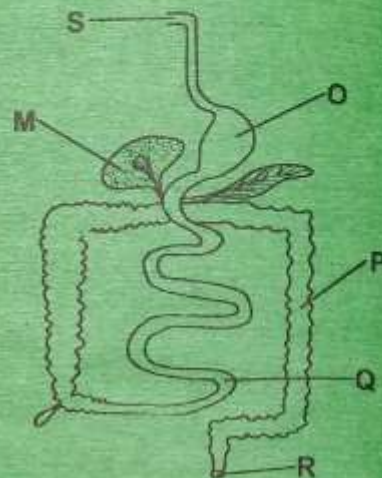
11. Your **dark line** **MUST** be within the box.
12. For each question **ONLY ONE** box is to be marked in each set of four boxes.

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

- Which one of the following types of soil erosion is **MOST LIKELY** to wash away the top layer of fertile soil?
 - Splash
 - Gulley
 - Rill
 - Sheet
- Which one of the following is an effect of organic fertilizers to the soil? They
 - releases specific nutrients to the soil.
 - reduces the production rate of plants.
 - encourage growth of weeds.
 - are required in large amount.
- Soil that has poor drainage also
 - is good for construction.
 - has fine texture.
 - make short ribbons.
 - contains alot of humus.
- Which one of the following components of soil require heating when investigating its presence in soil?
 - Humus and water
 - Mineral salts and humus
 - Water and living organism
 - Mineral particles and living organisms.
- Which one of the following chambers of the heart pumps blood to the lungs?
 - Left auricles
 - Right auricles
 - Left ventricles
 - Right ventricles

- The diagram below represents parts of the human digestive system.



The juice produced at the part labelled O is used to digest

- fat and oil
 - protein
 - vitamins
 - mineral salts
- Which one of the following statements is **TRUE** about the kidney as an excretory organ? It
 - removes lactic acids from the body.
 - excrete carbon dioxide from the body.
 - removes more urea than the skin.
 - is the largest excretory organ.
 - Which one of the following process come first?
 - Conception
 - Implantation
 - Parturition
 - Fertilization
 - In the human breathing system, exchange of gases occurs in the
 - airsacs
 - diaphragm
 - trachea
 - bronchi

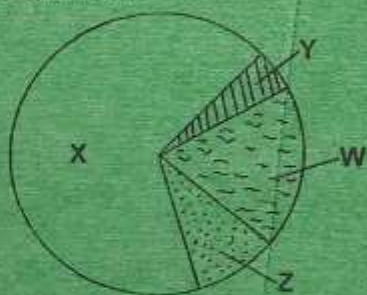
10. Which one of the following is an effect of water pollution to non living things?
- Lung cancer due to smoking.
 - Corrosion of iron sheet roofs.
 - Respiratory diseases due to harmful gases.
 - Reduced plant nutrients due to acid rains.

11. Which one of the following **LEAST** pollute the air?
- Tobacco smoking
 - Burning tyres
 - Decomposing waste
 - Aerosol sprays

12. Which one of the following is magnetic material?
- Aluminium foil
 - Silver coin
 - Staple pins
 - Copper rod

13. Which one of the following pairs of methods of separating mixtures can separate a solid mixture **ONLY**?
- Picking and winnowing
 - Use of magnet and filtering
 - Evaporation and picking
 - Decanting and sieving

14. The pie chart below shows the various components of air.



Which proportion represents the gas used in burning?

- W
- Z
- X
- Y

15. A small pin sink in water due to its
- size
 - shape
 - colour
 - material

16. Which one of the following is **COMMON** in gases and solids?
- Definite shape
 - No definite volume
 - Definite mass
 - No definite shape.

17. Which one of the following pairs of the processes require increase in temperature?
- Expansion and melting
 - Condensation and freezing
 - Evaporation and contraction
 - Melting and condensation

18. The following are health effects of drugs **EXCEPT**
- withdrawal
 - blackout
 - impaired judgement
 - truney

19. The following signs and symptoms were observed on a patient.
- Pain in the joints.
 - Lack of appetite.
 - Fever
 - Shivering and sweating

The **BEST** way of preventing the spread of the above disease is by

- Eating a well balanced diet.
- Administering immunization
- Destroying breeding places of mosquitoes.
- Eating food rich in iron.

20. The **BEST** way to prevent the spread of sexually transmitted infections among the adolescents is by

- avoiding drug abuse.
- being faithful to one partner.
- voluntary counselling and testing.
- abstinence from sex.

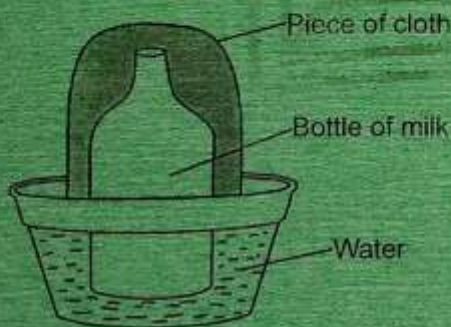
21. Which one of the following is an immunizable disease?

- Malaria
- Typhoid
- Marasmus
- Bilharzia

22. A child with wrinkled face and alert eyes should be given food rich in

- balanced diet.
- body building food.
- energy giving food.
- mineral salts.

23. The diagram below represents a method of preserving food.



The method shown above preserves food by

- killing the micro organism.
- keeping off air and bacteria.
- absorbing water.
- making the bacteria inactive.

24. Which one of the following pairs consist of energy giving food?

- Beans and pork
- Maize and peas
- Fat and oil
- Beef and mutton

25. Which one of the following is a function of dietary fibre in the body?

- Helps in food digestion.
- Helps to prevent dehydration.
- Removal of undigested materials.
- Prevents nutritional diseases.

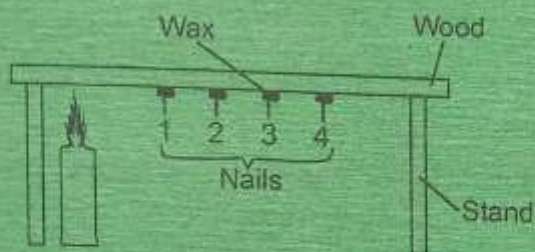
26. Which one of the following is **NOT** a source of current electricity?

- Dynamo
- Dam
- Torch battery
- Solar panel

27. Which one of the following pairs of materials is **CORRECTLY** grouped into opaque and translucent?

Opaque	Translucent
A. Milk	Oiled paper
B. Stone	Mirror
C. White paper	Lenses
D. Frosted glass	Clean water

28. The diagram below represents a set up that was used to demonstrate a certain aspect of heat.



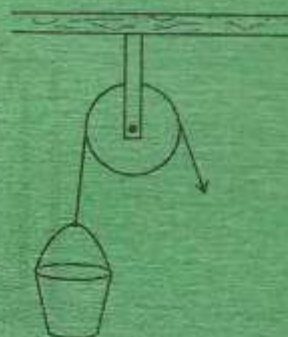
Which nail was the last to fall?

- A. 2
B. 3
C. None
D. 4
29. Which one of the following materials can cause an electric shock when inserted in a socket?
- A. Piece of paper
B. Wet stick
C. Plastic ruler
D. Piece of glass
30. Images are formed in the mirror due to
- A. bouncing of light.
B. dispersion of light.
C. bending of light.
D. splitting of light.
31. Which one of the following is **NOT** necessary when modelling the solar system?
- A. Plasticine
B. Thorn
C. Manilla paper
D. Cotton wool
32. During a science lesson, pupils were asked to fan themselves using their books. What did they conclude?
- A. Moving air has effects.
B. There is air around us.
C. There is moisture in air.
D. Moving air can be seen.

33. The clouds that are low in the sky also
- A. bring fine weather.
B. are grey in colour.
C. cover the whole sky.
D. irregular in shape.

34. A standard one girl wanted to lift a class eight girl on a seesaw. The standard eight girl should
- A. move fulcrum away from her.
B. sit closer to the fulcrum.
C. exchange the position with the class one girl.
D. sit far to the fulcrum.

35. Below is a diagram showing a single fixed pulley.



Three of the following principles are true about the pulley above **EXCEPT**

- A. it change the direction of force.
B. the effort applied is equal to the load.
C. the load distance is less than the effort.
D. the load and effort move in opposite direction.
36. All the following are ways of increasing friction. Which one is **NOT**?
- A. Retreading surfaces.
B. Using ball bearing.
C. Spreading sand on the surface.
D. Increasing the surface area in contact.

37. The diagram below represents a simple machine.



The above simple machine makes work easier by

- A. increasing the road distance.
 B. changing the direction of force.
 C. reducing the force of friction.
 D. making the slope gentle.
38. Which one of the following methods of maintaining simple tools provide safety to the user?
 A. Cleaning after use.
 B. Proper storage.
 C. Sharpening cutting edges.
 D. Oiling and greasing.
39. In which one of the following activities is water used in industries?
 A. Watering plants.
 B. Washing farm implements.
 C. Mixing chemicals.
 D. Swimming.
40. Which one of the following is a sign of cholera?
 A. Skin rashes.
 B. Blood in stool.
 C. Constipation.
 D. Dehydration.
41. Water that lather easily is also **LIKELY** to
 A. form scales in kettles.
 B. discolour the clothes.
 C. have fewer minerals.
 D. form scum with soap.

42. Which one of the following is **WRONGLY** matched with part that it affects?

Parasite	Part
A. Lungworm	Brain
B. Liverfluke	Liver
C. Tapeworm	Stomach
D. Hookworm	Small intestines

43. Which one of the following animals runs away when in danger?

- A. Snake
 B. Butterfly
 C. Cockroach
 D. Termite

44. The following are characteristics of animals

- (i) Has a moist skin.
 (ii) Lays fertilised eggs.
 (iii) Has scales.
 (iv) Has a varying body temperature.

Which of the above characteristics describe a salamander.

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

45. Which one of the following animals does **NOT** have a hard pad?

- A. Pig
 B. Sheep
 C. Cow
 D. Goat

46. Which one of the following pairs of animal feeds provide animal with energy?

- A. Bran and glycine
 B. Oats and molasses
 C. Saltlick and bone meal
 D. Desmodium and lucern.