

K.C.P.E SEVENTH TRIAL STANDARD EIGHT 2022

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.

SCIENCE

Example

In the Question Booklet:

14. Which of the following is **not** a method of controlling weeds?
- A. Digging them out
 - B. Slashing
 - C. Use of fertilizer
 - D. Topping

The correct answer is C (Pushing a wheel barrow)

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. Which one of the following diseases is **both** communicable and immunizable?
 - A. Typhoid
 - B. Anaemia
 - C. Malaria
 - D. Tetanus

2. Which of the following is an effect of soil pollution?
 - A. Respiratory diseases.
 - B. Death of small animals.
 - C. Corrosion of iron sheet.
 - D. Death of aquatic animals.

3. Which of the following is the **main** function of uterus during the birth process?
 - A. Providing room for foetal development.
 - B. Allowing fusion of sex cells.
 - C. Facilitates transfer of nutrients to the foetus.
 - D. Contraction and expelling of the baby.

4. Which of the following is an adaptation of some plants growing in dry areas?
 - A. Increased number of stomata.
 - B. Make food in the stems.
 - C. Leaves with a waxy upper surface.
 - D. Presence of air sacs.

5. Which one of the following is **not** a function of plasma? Transportation of
 - A. undigested food.
 - B. red blood cells.
 - C. carbon dioxide.
 - D. hormones.

6. Which one of the following method of preserving food is **mainly** used to preserve cooked foods?
 - A. Drying.
 - B. Salting.
 - C. Use of ashes.
 - D. Freezing.

7. Which of the following animals is **correctly** classified?

| | Internal fertilization | Varying temperature |
|----|------------------------|---------------------|
| A. | Duck | Platypus |
| B. | Snake | Ostrich |
| C. | Tortoise | Salamander |
| D. | Ilapia | Crocodile |

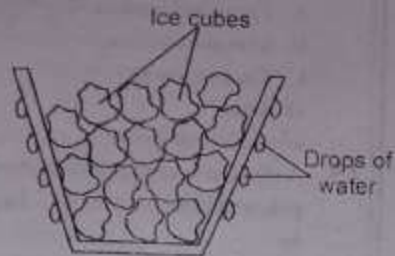
8. Which of the following animal parasites attack the brain and stomach of cattle and sheep?
 - A. Liver flukes
 - B. Tapeworm
 - C. Lungworms
 - D. Roundworms

9. Which of the following forms of energy require no medium of transmission?
 - A. Electricity and magnetism.
 - B. Light and heat.
 - C. Sound and light.
 - D. Heat and sound.

10. During a science lesson, pupils filled a transparent cylindrical container with small cubes of wood and observed the arrangement of the cubes in the container. They concluded that solids have definite
 - A. shape.
 - B. mass.
 - C. volume and shape.
 - D. volume.

11. Which of the following groups of food provide body with energy?
 - A. Beef, mutton, peas.
 - B. Apple, pork, maize.
 - C. Pineapple, spinach, kales.
 - D. Sugarcane, coconut, bacon.

12. A glass of jar with some ice cubes inside was left outside during a sunny day. Some droplets of water were formed on the sides as shown.



Which of the following process led to formation of droplets of water?

- A. Freezing forms ice cubes.
 - B. Evaporation of water.
 - C. Condensation of water vapour.
 - D. Melting of the ice cubes.
13. During digestion of food, minerals that helps in formation of blood and strong teeth are absorbed in the
- A. stomach.
 - B. large intestine.
 - C. mouth.
 - D. small intestine.
14. Which of the following effects of drug abuse **only** affects the drug abuser?
- A. Drug induced accident.
 - B. Marital conflict.
 - C. Loss of income.
 - D. Withdrawals symptoms.
15. The following are signs of a certain disease observed in a patient.
- i) Abdominal pains
 - ii) Fever
 - iii) Skin
 - iv) Diarrhoea and vomiting
- The patient is also **likely** to experience
- A. sweating at night.
 - B. swollen body parts.
 - C. aches in the muscles.
 - D. coughing blood.

16. Which one of the following is a characteristic found in flowers produced by maize plants?

- A. Large hairy stigmas.
- B. Firmly attached anthers.
- C. Sticky pollen grains.
- D. Produce nectar.

17. Which of the following simple tools make work easier by increasing the effort distance?

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

18. Which of the following is the second step when investigating how soil retain water?

- A. Pouring equal amounts of water on each type of soil at the same time.
- B. Putting cotton wool in the neck of each funnel.
- C. Placing funnels on the mouth of each of the three plastic bottles.
- D. Putting equal amounts of three types of soil in funnels.

19. The **main** reason why improved jiko has a clay lining is to

- A. make more durable.
- B. prevent heat loss.
- C. make it more attractive.
- D. prevent air pollution.

20. In which of the following cases is friction a disadvantage?

- A. A fish swimming.
- B. Erasing books.
- C. Skating on the road.
- D. Braking a motor bike.

21. The following are characteristics of a certain weed.

- i) *Tap roots.*
- ii) *White flowers.*
- iii) *Yellow fruits.*
- iv) *Thorns on the stem.*

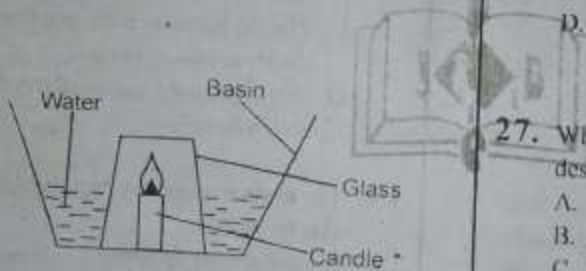
The weed is **likely** to be

- A. datura.
- B. pigweed.
- C. blackjack.
- D. sodom apple.

22. Which of the following mixture can be separated by use of a magnet?

- A. Office pins and iron filling.
- B. Sugar and silver coins.
- C. Staples and copper fillings.
- D. Steel wool and razor blades.

23. The set up below was used to investigate a certain aspect of matter.



The burning candles was covered for sometimes using a clear glass. Which observation was **not likely** to occur during the experiment?

- A. Candles went off after sometimes.
- B. Water level dropped in the basin.
- C. Air bubbles observed in the glass.
- D. Amount of air inside the glass will decrease.

24. Which of the following types of manure take the **longest** time to release nutrients to the soil?

- A. Farmyard manure.
- B. Compost manure.
- C. Green manure.
- D. Urea.

25. A disease where a patients body become pale and has chest pains is **best** controlled by

- A. administering vaccination.
- B. draining stagnant water.
- C. eating adequate balanced diet.
- D. living in a well ventilated room.

26. Which of the following activities will **not** lead to air pollution?

- A. Burning tyres and plastic materials.
- B. Use of aerosol sprays.
- C. Smell from decaying organic matter.
- D. Driving vehicle with well maintained engines.

27. Which of the following statements **best** describe rill erosion?

- A. It is mainly caused by wind and water.
- B. It occurs on steep slope.
- C. Leads to formation of deep channels.
- D. Best controlled by building gabions.

28. Which one of the following is **not** a simple tool?

- A. Tractor.
- B. Handcart.
- C. Fishing rod.
- D. Wheelbarrow.

29. Which of the following materials are **correctly** classified.

- | Opaque | Translucent |
|-------------|-------------|
| A. Milk | Paraffin |
| B. Mirror | Oiled paper |
| C. skylight | Porridge |
| D. Oil | Wind screen |

30. The **main** reason why livestock are fed on commercial feeds is

- A. to increase rate of production.
- B. to supplement other foods.
- C. its rich in fibre.
- D. to boost the immunity.

31. Which of the statements **best** describes a beak of nectar feeder?

- A. Long slender and slightly curved.
- B. Short, strong and straight.
- C. Long, strong and straight.
- D. Short, strong and hooked.

32. Which one of the following is a **common** classification between mould and algae?

- A. Make their own food.
- B. They are useful fungi.
- C. Depends on dead decaying plants.
- D. They do not produce flowers.

33. During a Science lesson pupils collected the following materials.

- i) 2 plastic pipes of the same size.
- ii) 2 candles
- iii) A matchbox

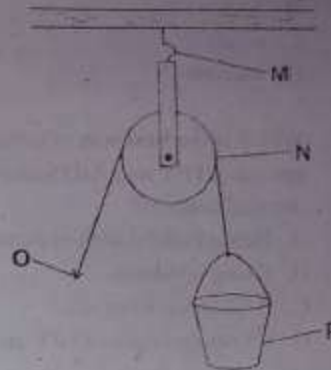
Which of the following aspects of light were they **likely** to investigate?

- A. How light is produced.
- B. Direction of light.
- C. Sources of light.
- D. Uses of light.

34. Which of the following is **true** about the first type of teeth to grow in human being?

- A. There are four in each jaw.
- B. Used for tearing meat.
- C. Have cusps and ridge.
- D. Have three roots.

35. The diagram below represents a single fixed pulley.



Which part represents the effort applied?

Part

- A. M
- B. N
- C. O
- D. P

36. Which of the following problem related to teeth can be controlled by eating a balanced diet?

- A. Cavities.
- B. Bad breath.
- C. Bleeding gums.
- D. Dental carries.

37. Which of the following statements is **incorrect** about sand soils?

- A. Large air spaces.
- B. Poor water retention.
- C. Make shortest ribbons.
- D. Easily eroded.

38. Which one of the following statements describe soft water?

- A. Contain alot of minerals.
- B. Save time and soap during laundry.
- C. Is safe for drinking.
- D. Discolour white garments.

39. The energy produced when objects vibrate travels faster in the
- gases
 - liquids
 - solids
 - vacuum

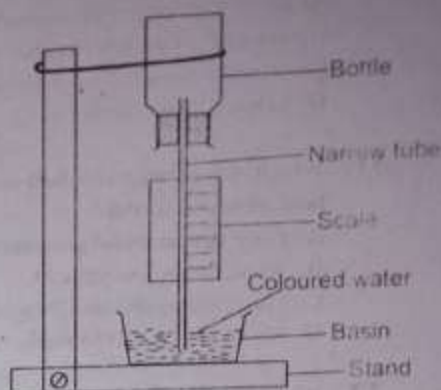
40. Which is the **best** way of controlling the spread of HIV and AIDS among newly married couples?
- Being faithful to their partner.
 - Using condoms.
 - Abstaining from sex.
 - Campaign against HIV and AIDS.

41. The following are functions of roots:
- Support the shoot
 - Storage of food
 - Manufacture of food for plant
 - Absorption of water and mineral salts

Which functions are performed by all roots?

- (ii) and (iv).
 - (i) and (ii).
 - (iii) and (iv).
 - (i) and (iv).
42. Which of the following pairs consists of sources of energy that is exhaustible?
- Wind and biogas.
 - Firewood and petrol.
 - Diesel and kerosene.
 - Sun and wind.

43. Study the weather instrument below and answer the question.



Which is the observation made on the instrument when the weather is hot?

- Water level drop in the basin.
- Water level in the tube rose.
- The bottle expand and broke.
- Water level drop in the tube.

44. Which of the following pairs of liquids form a uniform layer when mixed with methylated spirit?

- Ink and milk.
- Paraffin and diesel.
- Cooking oil and water.
- Diesel and milk.

45. Which of the following statements describe the second stage of HIV and AIDS?

- Its known as symptomatic.
- A person tests positive.
- A person has developed AIDS.
- It is the most dangerous state.

46. Which of the following is the use of water in the industry?

- Surfing
- Irrigation
- Sport fishing
- Making fountain

47. The following are effects of unpleasant sound **except**
- A. irritation.
 - B. ringing ears.
 - C. deafness.
 - D. mental disorder.
48. Which of the following activities is as a result of bending of light?
- A. Formation of shadow.
 - B. Swimming pools appearing shallow.
 - C. Use of a periscope to observe objects.
 - D. Formation of images on a mirror.
49. Two boys were balancing with one girl on a see saw. This shows that the
- A. girl is heavier than the two boys.
 - B. boys are heavier than the girl.
 - C. girl has the same mass as the two boys.
 - D. were sitting near the fulcrum.
50. Which of the following changes occurs when the pressure of chest cavity increases?
- A. The diaphragm flattens.
 - B. Lungs contract.
 - C. Ribs move inward and downward.
 - D. Air is expelled from the lungs.

