

BRAINWAVE K.C.P.E EXAMINATION PANEL



STANDARD EIGHT YEAR 2022

004

BRAINWAVE
PUBLISHERS

— SCIENCE —

Time: 1Hr: 40 Min

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 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 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. Chose 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:

4. A meal that has all the nutrients requirements is known as ____
- A. a palatable meal
 - B. a complete meal
 - C. a special meal
 - D. a balanced meal

The correct answer is **D** (a balanced meal)

On the answer sheet:

4. [A] [B] [C] **[D]** 14. [A] [B] [C] [D] 24. [A] [B] [C] [D] 34. [A] [B] [C] [D]

In the set boxes numbered 4, the box with letter **D** printed in it is marked.

11. Your dark line Must be within the box. Make your line as dark as possible.
12. For each question **Only One** box is to be marked in each set of four boxes.

Candidates should check the question papers to ensure that all questions are printed.

1. Which one of the following pairs of diseases is a child immunized against at sixth week, tenth week and fourth week?
- A. Poliomyelitis and tetanus
 - B. Tuberculosis and diphtheria
 - C. Whooping cough and tetanus
 - D. Diphtheria and poliomyelitis

2. Which one of the following heat transfer processes are **correctly** matched to the medium of transmission?

	Radiation	convection
A.	Gases	liquids
B.	Solids	gases
C.	Air	Solids
D.	Vacuum	liquids

3. The diagram below represents a type of beak.



Which one of the following birds has a beak similar to the one shown?

- A. Humming bird
 - B. Pigeon
 - C. Duck
 - D. Owl
4. The force that opposes motion cannot be reduced by
- A. use of treads
 - B. use of oil and grease
 - C. streamlining an object
 - D. use of ball bearings

5. The following are adaptations of plants to environment.
- (i) Thick leaves
 - (ii) Flexible stems
 - (iii) Folding leaves during day time
 - (iv) Thin cuticle

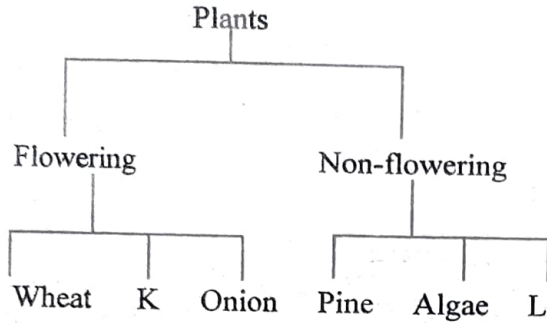
Which one of the above pairs of adaptation is for dry areas?

- A. (ii) and (iv)
 - B. (ii) and (iii)
 - C. (i) and (iii)
 - D. (iii) and (iv)
6. Which one of the following is a health effects of drug abuse?
- A. Withdrawal symptoms
 - B. Rape
 - C. Drug induced accidents
 - D. Marital conflicts

7. Which one of the following statements is **true** about the left auricle? It
- A. has a thick wall
 - B. receives oxygenated blood
 - C. has no valves
 - D. pumps blood through pulmonary artery

8. Which one of the following is **not** a sign of ill health in livestock?
- A. Coughing
 - B. Reduced yields
 - C. Loss of weight
 - D. Lower yields

9. The table below shows classification of plants



The plants K and L can be represented by

K

- A. Peas
- B. Cypress
- C. Sugarcane
- D. Sisal

L

- A. Moss
- B. Greengrams
- C. Cabbage
- D. Cactus

10. Which one of the following statements best describes hard water? It

- A. waste soap
- B. lathers easily
- C. is boiled water
- D. has no mineral salts

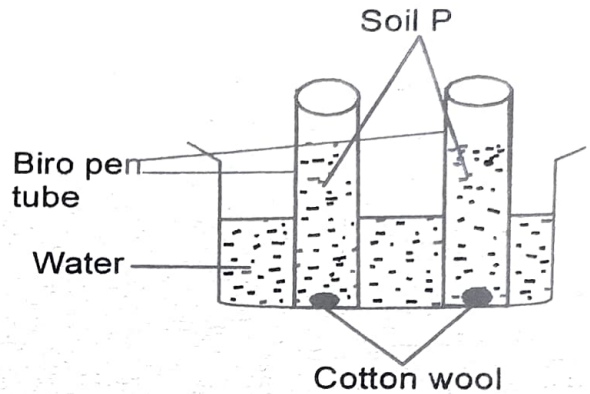
11. Which one of the following common communicable diseases can be spread due to lack of proper ventilation?

- A. Tetanus
- B. Malaria
- C. Tuberculosis
- D. Bilharzia

12. Which one of the following **does not** contain chemical energy?

- A. Kerosene
- B. Car battery
- C. Dry cells
- D. Bicycle dynamo

13. To determine soil capillarity std, five pupils from Toka school used a soil sample to set up an experiment as shown below.



The pupils could not make the correct conclusion from the above set-up because

- A. they used biro pen tube
- B. they used cotton wool of the same size
- C. they used equal amounts of soil in the tubes
- D. they used the same type of soil

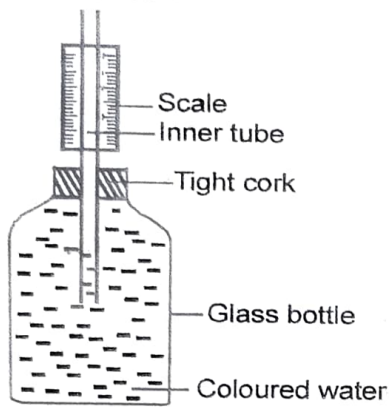
14. Which one of the following simple tools has the position of the effort between the fulcrum and the load?

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

15. Which pair consists of items that float on water because of their shape?

- A. Ship and candle wax.
- B. Boat and bottle top.
- C. Toothpick and razor blade.
- D. Feather and ferry.

16. The illustration below shows an improvised liquids thermometer?



Which one of the following observation is made when the above instrument is put outside on a sunny day?

- A. The level of water in the straw rises
 B. The water loses its colour
 C. The level of water in the straw goes down
 D. The level of water in the straw remains unchanged
17. Which one of the following shows a major and a minor component of the environment?
- A. Air and light.
 B. Heat and buildings.
 C. Soil and plants.
 D. Water and animals.
18. The **main** reason as to why mulching is done in a vegetable garden is to
- A. control soil erosion
 B. suppress growth of weeds
 C. increase soil fertility
 D. conserve soil moisture.

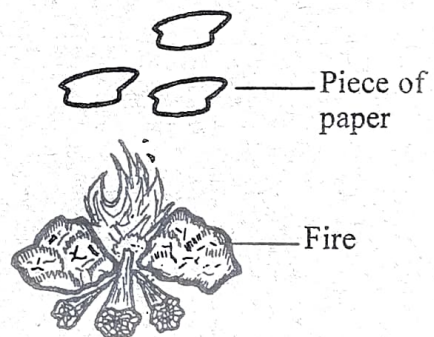
19. Which one of the following lists consists of food that is recommended to a person suffering from anaemia?

- A. Rice, beans, kale
 B. Kidney, liver, green vegetables
 C. Yams, maize cassava
 D. Kales, ugali, fish

20. Which one of the following shows the third fifth and the seventh planet from the sun respectively?

- A. Earth, Jupiter, Saturn
 B. Mars, Saturn, Neptune
 C. Earth, Jupiter, Uranus
 D. Earth, Jupiter, Neptune

21. Class five pupils cut small pieces of papers and dropped them over a fire as shown below.

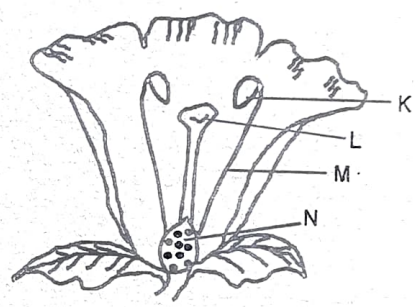


The above experiment was done to demonstrate that

- A. air has mass
 B. hot air rises
 C. air occupies space
 D. papers conduct heat

22. Which one of the following shows a pair of animals whose body temperature remains constant regardless of the surrounding temperature?
- Ostrich and rat
 - Fish and weaverbirds
 - Weaverbird and toad
 - Crocodile and whale
23. The gas that occupies 21% of the air is used in three of the following ways **except**
- germination
 - supporting burning
 - making plant food
 - breathing
24. All the three states of matter _____.
- have definite size
 - expand on cooling
 - have no definite shape
 - have definite mass
25. Which one of the following is **not** a safety measure against current electricity?
- Avoid touching switches with wet hands
 - Do not overload sockets
 - Avoid putting objects in sockets
 - Avoid sheltering under trees
26. Which one of the following correctly shows the **correct** path followed by urine from the kidney?
- Ureter → urethra → bladder
 - Ureter → bladder → urethra
 - Urethra → bladder → ureter
 - Urethra → ureter → bladder

27. The type of weeds that has horizontal stems is also **likely** to
- have strong unpleasant smell
 - have thorns on the leaves
 - have blue flowers
 - be poisonous
28. Post test counselling is done to a person
- after taking a HIV test
 - before taking treatment for HIV
 - after taking treatment for HIV
 - before taking a HIV test
29. Study the diagram below and answer the questions that follows.



Which part of the flower marked K, L, M and N performs the same function as the vagina in females?

- K
 - L
 - M
 - N
30. Which one of the following shows the correct order of steps followed when separating a mixture of sand and salt?
- Dissolve → filter → evaporate
 - Filter → dissolve → evaporate
 - Use of magnet → filter → evaporate
 - Filter → evaporate → dissolve

31. Which one of the following does not demonstrate how trees conserve soil?
- Leaves of trees decomposing to form humus
 - roots holding the soil particles
 - trees providing shade to reduce evaporation
 - roots absorbing water and minerals salts.

32. Class six pupils listed methods of food preservation as follows.

(i) *Use of low temperature*

(ii) *Salting*

(iii) *Drying*

(iv) *Canning*

(v) *Smoking*

Which pair of the above methods preserve food by removing moisture from food?

- (i) and (iv)
 - (ii) and (iv)
 - (ii) and (iii)
 - (i) and (v)
33. A sheet of paper and a stone were released from the same height at the same time. Which one of the following was the correct observation made?
- The paper hit the ground first
 - Both objects reached the ground at the same time
 - Both objects remained floating in the air
 - The stone reached the ground first.

34. Which one of the following items are used together with a weighing balance in order to determine then mass of an object?

- Standard weights
- Pulleys
- Spring balance
- Rollers

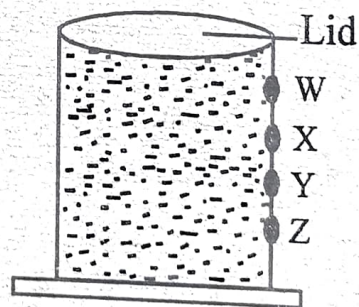
35. A rainbow is formed in the sky when

- it is raining and windy
- it is raining and the sun shining at the same time
- it is cloudy and rainy
- it is sunny and cloudy

36. Which one of the following pairs shows use of water in industries?

- Skiing and surfing
- Making pulp and swimming
- Making fountains and cooling machines
- Making soft drinks and surfing

37. Amos made four holes on the sides of a tin and sealed them with plasticine. He then completely filled the tin with water and tightly placed a lid as shown.



From which one of the holes did he observe the shortest jet of water?

- X
- Z
- Y
- W

38. Which one of the following simple machines work easier by changing the direction of force?

- A. Road winding up a hill
- B. A wheelbarrow
- C. A ladder
- D. Single fixed pulley

39. A farmer practicing stall feeding is most likely to feed his animals with

- A. concentrates and pasture
- B. Pasture and fodder
- C. Fodder and concentrates
- D. Posture and hay

40. Which one of the following materials is added to a compost heap in order to provide additional nutrients?

- A. Farm yard manure
- B. Wood ash
- C. Top soil
- D. Dry leaves

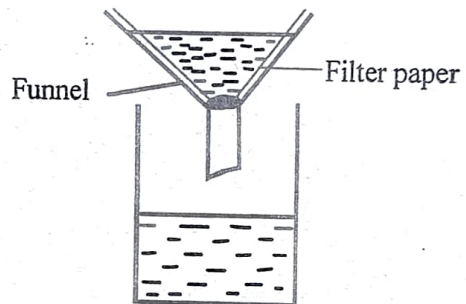
41. Which one of the following plants does not store food in the stem?

- A. Cactus
- B. Onion
- C. Irish potato
- D. Sugarcane

42. Which one of the following internal livestock parasites attacks both fish and poultry?

- A. liverflukes
- B. tapeworms
- C. lungworms
- D. roundworms

43. The set up below was used to separate mixture by a group of std 7 pupils.



Which one of the following mixtures cannot be separated using the above method?

- A. water and sawdust
- B. sand and water
- C. sugar and water
- D. water and ash

44. The type of teeth used for cutting food

- A. are chisel shaped
- B. have two roots
- C. are sharp and pointed
- D. have ridges

45. The type of soil erosion that occurs without being noticed can best be controlled by
- A. building terraces
 - B. mulching
 - C. building gabions
 - D. planting cover crops

46. The following are methods of maintaining simple tools

(i) *Sharpenings*

(ii) *Painting*

(iii) *Oiling*

(iv) *Cleaning*

Which one of the following practices is **not** done regularly?

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

47. The stage of HIV infection in which the patient tests positive but shows no signs and symptoms lasts between

- A. 4 weeks to 6 weeks
- B. 6 weeks and 12 years
- C. 6 weeks to 12 months
- D. 4 months and 6 months

48. Plants do not depend on other for
- A. support
 - B. habitat
 - C. carbon dioxide
 - D. shade

49. Which one of the following activities does not pollute water resources in the environment?

- A. Cultivating along river banks
- B. Releasing treated sewage in the river
- C. Applying organic fertilizers
- D. Spraying crops with pesticides

50. During a Science lesson, std 5 pupils struck a metallic bar from different heights using a stick. The aspect of sound that they were investigating was likely to be

- A. direction of sound
- B. pitch of sound
- C. special sounds
- D. volume of sounds.