

BRAINWAVE K.C.P.E EXAMINATION PANEL



STANDARD EIGHT YEAR 2022

003

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.

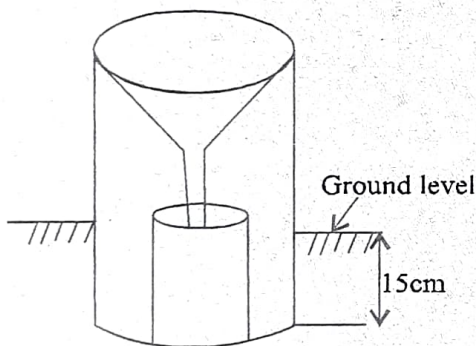
11. Your dark line Must be within the box. Make your line as dark as possible.
12. For each question **Only One** box is to be marked in each set of four boxes.

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

- Which one of the following foods are all rich in carbohydrates?
 - Kales, beans, rice
 - Lemon, pineapple, oranges
 - Beef, fish, pork.
 - Maize, sorghum, millet.

- The following are functions of amniotic fluid **except**?
 - Provide warmth to the foetus
 - Exchange of food nutrients
 - Allow free movement of the foetus.
 - Protects foetus from injury.

- The illustration below shows a simple rain gauge.



The **main** reason why the instrument is buried 15cm into the ground is to

- avoid splashing of soil particles into the funnel
- make it more stable and avoid theft
- prevent evaporation of the collected water
- trap and collect all the rain water.

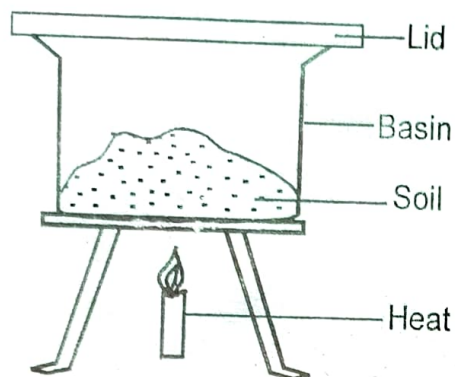
- The stage of HIV infection between the entrance of the virus and the appearance of the first symptoms is called _____.
 - incubation stage
 - symptomatic stage
 - full blown stage
 - window stage.

- Flowers that have long style with feathery stigma which hang outside the flower are also **likely** to
 - produce large amount of pollen grains
 - have sticky pollen grains
 - have anthers that are firmly attached
 - have brightly coloured petals.

- Which one of the following represents the **correct** order of foetal development?
 - Embryo → foetus → zygote.
 - Zygote → embryo → foetus.
 - Zygote → foetus → embryo
 - Foetus → embryo → zygote.

- Which one of the following is a method of controlling human intestinal worms?
 - Dipping.
 - Deworming.
 - Rotational grazing.
 - Spraying.

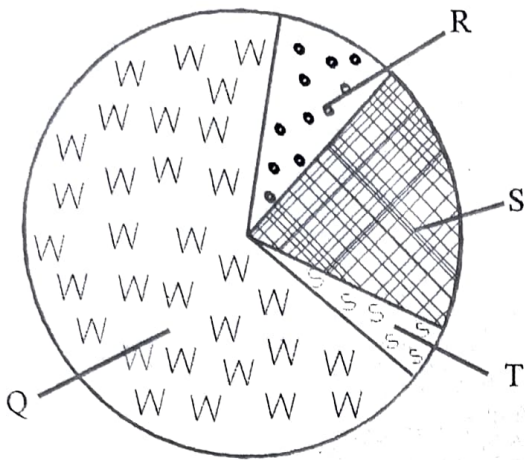
8. Std 5 pupils carried out the activity below to investigate the presence of organic matter in the soil.



The pupils could not make the best conclusion because

- A. they heated the soil
B. they used a candle
C. they used a tin instead of a glass
D. they placed a lid on the tin.
9. Which one of the following statements describe proper use of medicines?
A. Always store medicine in a dry place.
B. Complete the dosage given.
C. Medicine that remain should be shared.
D. Store medicines in lockable cupboards.
10. A bowl made of aluminium floats in water while a nail made of iron sinks. This is due to the difference in
A. type of material
B. size
C. shape
D. colour
11. Which one of the following is a sign of a person suffering from marasmus?
A. Wrinkled face
B. Whitish eyelid
C. Weak bone and teeth
D. Sores at the corners of the mouth.
12. Which one of the following is an effect of ill health in livestock?
A. Stunted growth.
B. Rough coat.
C. Reduced yields.
D. Lower yields.
13. Which one of the following pairs of sexually transmitted infection are caused by a virus?
A. Syphilis and gonorrhoea
B. Chancroid and HIV/AIDS
C. Genital herpes and HIV/AIDS
D. Chancroid and syphilis
14. In which one of the following ways is water used sparingly?
A. Turning off taps after use.
B. Recycling waste water from factories.
C. Using domestic waste water to flush toilets.
D. Harvesting rain water.
15. Deoxygenated blood leaves the heart through the
A. pulmonary vein
B. aorta
C. venacava
D. pulmonary artery.

16. The diagram below shows the composition of gases in the air



Which letter represents the gas given out by plants during photosynthesis?

- A. R
 B. S
 C. Q
 D. T
17. Radiation is a method of heat transfer that takes place in
- A. air and liquids
 B. vacuum only
 C. gases and soils
 D. gases only.
18. Which one of the following is the main reason why wood ash is added in the compost manure?
- A. To introduce more bacteria.
 B. To provide food for bacteria.
 C. To quicken decomposition.
 D. To add nutrients.

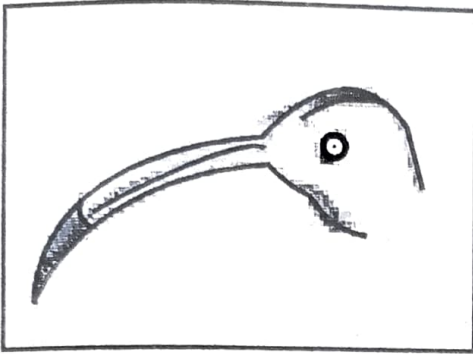
19. The following are signs and symptoms of waterborne disease

- (i) *Fever*
 (ii) *Vomiting*
 (iii) *Rashes on the skin*
 (iv) *Itching in the bowels*

Which pair are signs for both the bilharzia and typhoid?

- A. (i) and (iii)
 B. (i) and (ii)
 C. (iii) and (iv)
 D. (ii) and (iv)
20. Which one of the following simple machines makes work easier by increasing the effort distance?
- A. A spade
 B. A fixed pulley
 C. Ladder
 D. A wheelbarrow.
21. Which one of the following pairs of liquids are miscible?
- A. Water and cooking oil.
 B. Milk and kerosene.
 C. Milk and petrol.
 D. Kerosene and cooking oil.

22. The diagram below shows the beak of a certain bird.



The bird most **likely** feeds on

- A. flesh
 - B. nectar
 - C. insects
 - D. grains
23. The reason why molars and premolars of a herbivore grow throughout its life is to
- A. replace the worn out parts
 - B. hold food materials tightly in the mouth
 - C. enable it to turn food material
 - D. enable it to grind and chew food.
24. Which one of the following component of the environment is found everywhere?
- A. Air
 - B. Water
 - C. Soil
 - D. Plants

25. DPT is a vaccine administered to infants for protection against the following diseases **except**

- A. Whooping cough
- B. Tetanus
- C. Tuberculosis
- D. Diphtheria

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

- A. Solar panel.
- B. Bicycle dynamo.
- C. Dry cells.
- D. Water dams.

27. The following are some of the stages in the birth process

(i) Dilation of the cervix.

(ii) Expulsion of the after birth.

(iii) Contraction of the uterine walls.

(iv) Cutting of the umbilical cord.

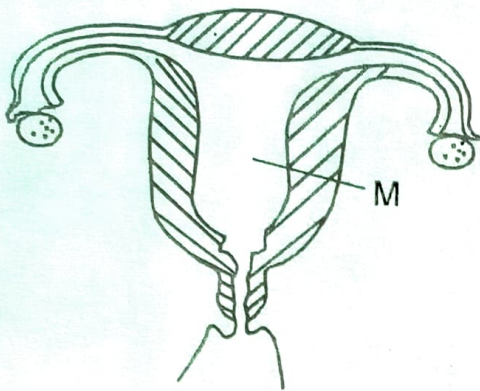
Which one of the above stages come last during the birth process?

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

28. We should not spray crops against the direction of wind **mainly** to avoid

- A. inhaling the chemical
- B. wasting the chemical
- C. skin coming into contact with the chemical
- D. air pollution.

29. The diagram below represents the female reproductive system.



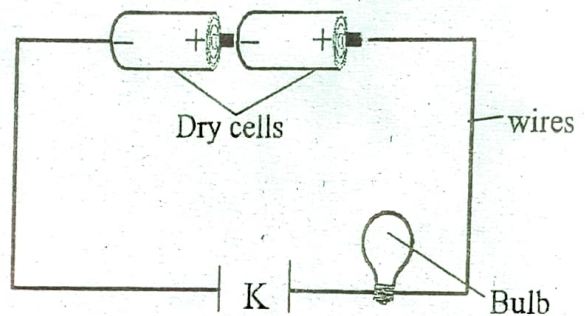
Which one of the following processes takes place in the part marked **M**?

- A. Fertilization
 B. Ovulation
 C. Implantation
 D. Menstruation
30. A plant with thin cuticle and shallow roots is also **likely** to have
- A. succulent stems
 B. increased number of stomata
 C. leaves reduced to thorns
 D. stomata on the under side of the leaf.
31. The following are effects of drug abuse
- (i) *Addiction*
 (ii) *Rape*
 (iii) *Impaired judgement*
 (iv) *Truancy*
- Which pair of the above effects are health effects?
- A. (i) and (ii)
 B. (iii) and (iv)
 C. (ii) and (iv)
 D. (i) and (iii).

32. Which one of the following statement best describe cumulus clouds? They are
- A. found low in the sky
 B. dark grey in colour
 C. a sign of heavy rainfall
 D. flat bottomed.

33. Three of the following are recreational uses of water **except**
- A. surfing
 B. making fountain
 C. boat riding
 D. swimming.

34. The diagram below shows a set up to investigate good and poor conductors of electricity.



Which one of the following material when put at point **K** will make the bulb light?

- A. Razor blade.
 B. Cotton wool.
 C. Dry stick.
 D. Plastic ruler.
35. Which one of the following weeds has blue flowers and stems that grow along the ground?
- A. Wandering Jew
 B. Mexican marigold
 C. Pigweed
 D. Black jack

36. Below are characteristics of a certain type of soil
- (i) *Large air space*
 - (ii) *Smooth texture*
 - (iii) *Has the smallest particles*
 - (iv) *Spread easily*
 - (v) *Makes long ribbons*

Which pair describes the soil that has the **best** drainage?

- A. (i) and (ii)
 - B. (i) and (v)
 - C. (iii) and (v)
 - D. (i) and (iv)
37. Which one of the following shows a pair of non-magnetic material **only**?
- A. Iron and nickel.
 - B. Steel and copper.
 - C. Aluminium and silver.
 - D. Zinc and iron.

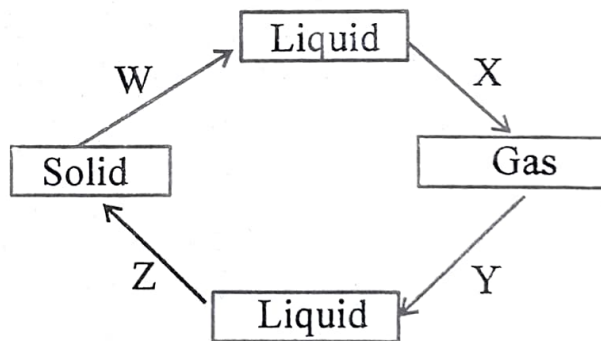
38. Which one of the following blood components is attacked by malaria parasites?
- A. Plasma
 - B. Red blood cells
 - C. White blood cells
 - D. Platelets

39. Which one of the following consists **only** of substances that have no definite shape but have a definite volume?
- A. Chalk dust and water.
 - B. Milk and ink.
 - C. Oxygen and smoke.
 - D. Stone and pin.

40. On a see saw a lighter girl can lift a heavier girl when
- A. the lighter girl moves close to the fulcrum
 - B. the two girls interchange positions
 - C. the heavier girl stands on it
 - D. the heavier girl moves closer to the fulcrum.

41. Which one of the following digestive juice is the last to be produced in the alimentary canal?
- A. Intestinal juice
 - B. Gastric juice
 - C. Saliva
 - D. Pancreatic juice.

42. The diagram below simplifies the changes of state in matter.



Which pair of the above processes require a decrease in temperature?

- A. W and Z
- B. X and Y
- C. Y and Z
- D. W and Y.

43. Which one of the following is **not** a reason for lighting the house properly?

- A. To discourage pests.
- B. To feel warm.
- C. To avoid accidents.
- D. To read comfortably.

44. Which one of the following internal livestock parasites attack fish and poultry?

- A. Lung worms.
- B. Tapeworms.
- C. Roundworms.
- D. Livefluke.

45. Which one of the following methods of food preservation is **both** modern and traditional?

- A. Canning
- B. Refrigeration
- C. Use of honey
- D. Drying

46. Mass is measured using a _____.

- A. weighing balance
- B. beam balance
- C. spring balance
- D. barometer.

47. In which one of the following activities is friction **not** required?

- A. Swimming.
- B. Braking.
- C. Walking down a hill.
- D. Grinding maize.

48. Which one of the following pairs of gases causes acid rain?

- A. Carbon dioxide and carbon dioxide.
- B. Carbon dioxide and sulphur dioxide.
- C. Rare gases and nitrogen.
- D. Sulphur dioxide and carbon dioxide.

49. Which one of the following pests is **correctly** matched with the part of crop it attacks?

	Pest	Part of crop attacked
A.	Cutworm	seeds
B.	Weevils	roots
C.	Stalkborers	stems
D.	Aphids	stems

50. A mixture of ink and kerosene can be separated by;

- A. filtering
- B. sieving
- C. evaporation
- D. decanting.