

K.C.P.E CHALLENGE

STD. 8 TERM 3 - 2014

SCIENCE

READ THESE INSTRUCTIONS CAREFULLY

1. Use an ordinary pencil only.
2. Make sure that you have written on the answer sheet.

Time: 1 Hr 40 Min.

I. YOUR NAME

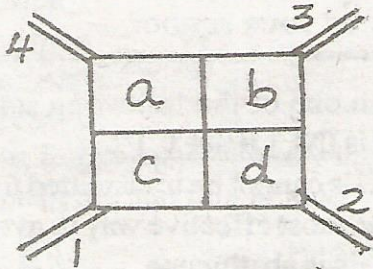
II. YOUR INDEX NUMBER

III. NAME OF YOUR SCHOOL

1. Any change that interferes with the normal functions of body organs and systems of an animal is called _____
A. ill-health
B. stunted growth
C. good health
D. disease transmission
2. Which one of the following animals is **NOT** well matched with its products?
A. Cattle - beef, milk, skin
B. Sheep - mutton, skin, milk
C. Goats - mohair, mutton, milk
D. Poultry - feathers, eggs, meat
3. Which one of the following nutrients is required by the body in small quantities?
A. Carbohydrates B. Proteins
C. Minerals D. Fats and oils
4. An expectant mother should avoid too much fats in her diet because they might bring about _____
A. constipation in the mother
B. lack of milk for the infant
C. less energy in her body
D. heartburn and nausea
5. Which of the following is **NOT** a stage of HIV infection?
A. Death stage
B. Full blown stage
C. Asymptomatic stage
D. Symptomatic stage
6. The following are signs and symptoms of a certain disease.
i) Vomiting.
ii) Pain in the joints.
iii) Shivering and shaking.
iv) Headache.
The disease described above is _____
A. TB B. common cold
C. malaria D. tetanus
7. Which one of the following statements about STI's is **INCORRECT**?
A. STI's cannot be transmitted through kissing
B. The most effective way to avoid contracting STI's is abstinence
C. STI's are spread through sexual contact
D. STI's can be passed from mother to the unborn baby
8. When investigating conditions necessary for germination of seeds, a set up in which water is first boiled and then cooled is used. The purpose of boiling water is to _____
A. increase warmth
B. remove air
C. reduce the moisture
D. break the seed coat
9. Which one of the following is **NOT** a characteristic of healthy crops?
A. Their shoots are strong and grow upright
B. They have spots and streaks
C. They grow fast
D. They have a high yield
10. Which one of the following statements does **NOT** describe interdependence between plants?
A. Plants growing on other plants up to maturity
B. Plants obtaining food from another plant
C. Intercropping legumes with maize in a farm
D. A climber twinning on another woody - stemmed plant for support
11. Three of the following are disadvantages of using hard water. Which one is **NOT**?
A. Hard water clog pipes
B. Hard water increases rate of digestion
C. Hard water wastes soap
D. Hard water stains cooking utensils
12. Which ones of the following are the major reproductive organs in both male and female human beings?

- A. Vagina and penis
- B. Fallopian tube and urethra
- C. Ovary and testis
- D. Uterus and penis

13. The process by which harmful products are removed from the body is termed as _____
- A. respiration
 - B. excretion
 - C. reproduction
 - D. accumulation
14. Below is a diagram of a simplified mammalian heart.



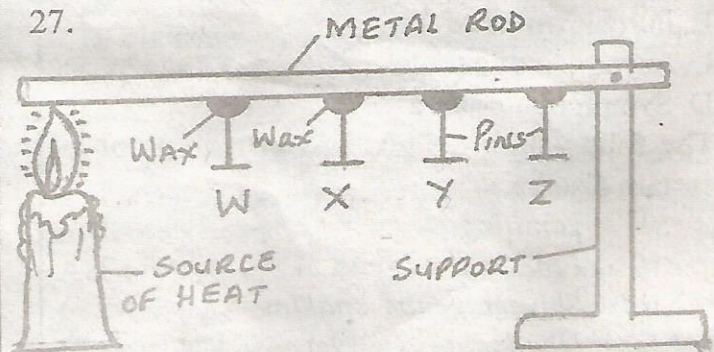
Which chambers and blood vessels contain oxygenated blood only?

- A. 1, 4 a, c
 - B. 2, 3 a, c
 - C. 1, 4 b, d
 - D. 2, 3 b, d
15. Which one of the following living organisms do bilharzia flukes enter in water before they can later infect a person?
- A. Fresh water fish
 - B. Fresh water bacteria
 - C. Aquatic worms
 - D. Fresh water snails
16. Three of the following are ways of conserving water. Which one is NOT?
- A. Repairing leaking pipes and taps
 - B. Using the sprinkle method of irrigation
 - C. Planting napier grass along the river banks
 - D. Digging trenches and dams to trap run-off water
17. Drenching is a method of controlling livestock parasites. Which of the following parasites will NOT be controlled through drenching?
- A. Tapeworms
 - B. Liver flukes
 - C. Ticks
 - D. Roundworms
18. Which one of the following is NOT an adaptation to movement in fish?
- A. Gills
 - B. Fins
 - C. Oily and slippery scales
 - D. Streamlined body
19. One of the following statement is NOT true about reptiles. Which one?
- A. Their body temperature varies according to their surrounding
 - B. They lay eggs
 - C. Their bodies are covered by dry scales
 - D. They have claws on their feet

20. The type of animal feeds where specific nutrients are mixed together to make a particular type of food is known as _____

- A. fodder
 - B. legumes
 - C. hay
 - D. concentrates
21. Rotational grazing can be done in three of the following ways EXCEPT _____
- A. strip grazing
 - B. tethering
 - C. stall feeding
 - D. paddocking
22. Nancy a class eight pupil started complaining of the following:
- i) fever
 - ii) stomachache
 - iii) diarrhoea
 - iv) dizziness
- The pupil may have suffered from _____
- A. a deficiency disease
 - B. HIV/AIDS infection
 - C. an allergy
 - D. food poisoning
23. Which one of the following is INCORRECT about people with HIV/AIDS?
- A. They need balanced diet
 - B. Their foods should be undigestible
 - C. Their foods should include fibre
 - D. Their bodies require rebuilding and protection against opportunistic diseases
24. Solids that do NOT dissolve in a liquid are said to be _____
- A. solvents
 - B. solutes
 - C. insoluble
 - D. soluble
25. When the amount of heat is decreased matter can _____
- A. expand
 - B. melt
 - C. evaporate
 - D. contract
26. The softness or loudness of a sound depends on _____
- A. the source of the sound
 - B. pitch
 - C. the size of vibrations
 - D. the object producing it

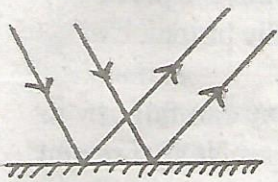
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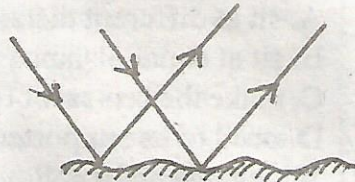
Ayako carried out the experiment shown. Which of the following is NOT true about what happened shortly after the candle was lit?

- A. Nail Z fell last
 - B. Nail W fell first
 - C. Heat passed from the hotter end to the other end of the metal rod
 - D. The nails fell off the metal rod immediately
28. Which one of the following is **NOT** true about a bicycle dynamo?
- A. It has a magnet in the middle
 - B. Is a simple generator
 - C. It stores electrical energy
 - D. It has many loops of copper wires coiled round the magnet

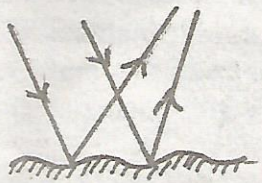
29. The following are some of the problems caused by soil erosion except one. Which one is it?
- A. Soil pollution
 - B. Water pollution
 - C. Loss of rich fertile soil
 - D. Difficulty in movement
30. Which one of the following is a disadvantage of using manures and fertilizers?
- A. Helps plants to grow fast
 - B. Organic manures conserve moisture
 - C. Improve the soil structure
 - D. Manures and fertilizers can scorch plants
31. Which of the following diagrams shows regular reflection of light?



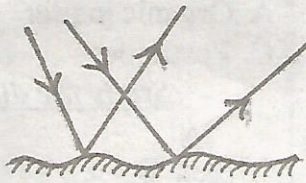
A.



B.



C.



D.

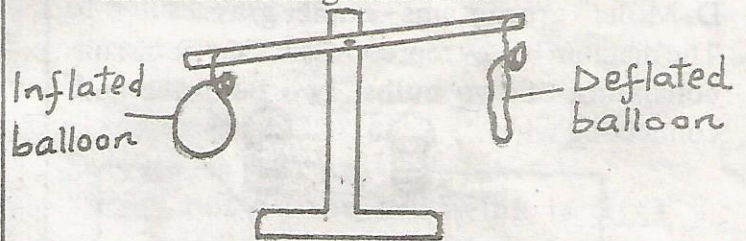
32. Plants with flexible stems are likely to _____
- A. be xerophytes
 - B. have thin cuticle
 - C. be deciduous
 - D. be cacti
33. Bright twinkling objects which produce their own light are called _____
- A. planets
 - B. stars
 - C. shooting stars
 - D. stars and sun

Study the weather chart below.

Day	Morning	Afternoon	Evening
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			

Which one is the **CORRECT** statement about the weather chart above?

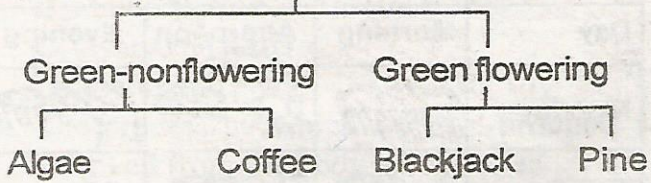
- A. It rained three times a day
 - B. Whenever it rained it was windy before
 - C. It was sunny and cloudy every day
 - D. There was at least a good day for washing clothes
35. Yvonne performed an experiment as the one shown in the diagram below.



What was Yvonne trying to investigate?

- A. Matter has mass
 - B. Matter occupy space
 - C. Matter contracts
 - D. Matter expands
36. Which one of the following is **NOT** true about separation of mixtures?
- A. A magnet can be used to separate magnetic and non-magnetic substances
 - B. Decanting can be used to separate a soluble substance from a liquid
 - C. Wind must be present in winnowing
 - D. Decanting can also be used to separate immiscible liquids
37. A feather of a bird floats on water because of its _____
- A. length
 - B. shape
 - C. material
 - D. size
38. The diagram below represents classification of plants.

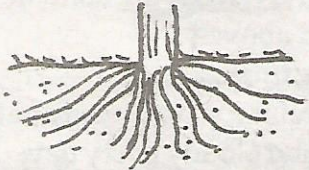
PLANTS



Which two plants are **WRONGLY** classified from the diagram above?

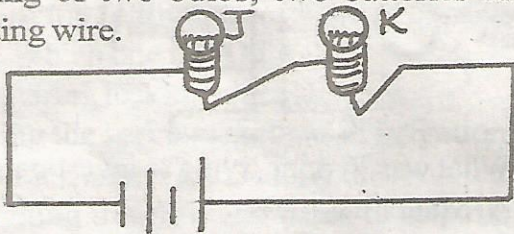
- A. Algae and coffee
- B. Blackjack and pine
- C. Algae and blackjack
- D. Coffee and pine

39. Which ones of the following plants have the root system as the one in the diagram below?



- A. Sorghum - wheat - coconut
- B. Coconut - blackjack - maize
- C. Beans - peas - groundnuts
- D. Millet - greengrams - napier grass

40. The diagram below represents an electric circuit consisting of two bulbs, two batteries and connecting wire.



If bulb J blows up, what will happen to bulb K?
It will _____

- A. not light at all
- B. become brighter
- C. become dim
- D. light just like before

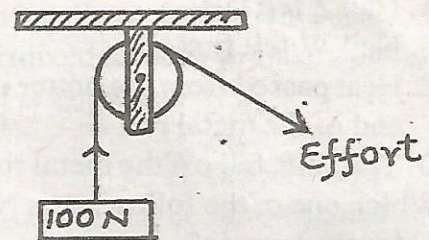
41. What happens when a force is applied in the opposite direction of a moving object?

- A. The moving object increases the speed
- B. The moving object changes the side
- C. The moving object stops
- D. The moving object breaks

42. In which one of the following activities is friction **NOT** needed?

- A. When sharpening a knife with a file
- B. When stopping a bicycle
- C. When smothering a piece of timber using a piece of sand paper
- D. When sliding a crate of soda across a floor

43.



The diagram shows a load of 100N being lifted using a single fixed pulley. The effort required to raise the load is _____

- A. equal to the load
- B. half the load
- C. more than the load
- D. slightly less than the load

44. One of the following is **NOT** a proper care and maintenance of tools. Which one is it?

- A. Tools should be stored in a dry place
- B. Tools should be thrown away when they break
- C. Tools should be handled with a lot of care
- D. Tools should be cleaned after use

45. The commonly used lubricants in moving parts of an engine are _____

- A. water and paint
- B. kerosene and petrol
- C. grease and oil
- D. petrol and diesel

46. When two boys of the same mass balance on a see-saw they _____

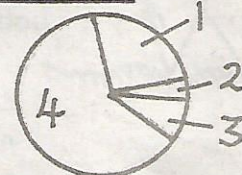
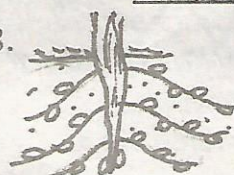
- A. sit at different distances from the pivot
- B. sit at equal distance from the pivot
- C. make the see-saw break
- D. need to be supported as they can fall off

47. Which one of the following does **NOT** threaten the survival of living organisms in the soil?

- A. Organic matter
- B. Herbicides
- C. Pesticides
- D. Inorganic matter

Study the diagrams below.

48.



The air which is found in nodule swellings in roots below is _____

- A. 1
- B. 2
- C. 3
- D. 4

49. Lwangu a class eight pupil breathed on a mirror. The mirror became misty. What was the trying to demonstrate?

- A. Evaporation
- B. Condensation
- C. Freezing
- D. Melting

50. Ohondo was seen taking her six weeks old baby to the clinic. Which of the following vaccine was the baby likely to be given?

- A. Measles
- B. BCG
- C. DPT
- D. Yellow fever