

ACHIEVERS FOCUS EXAMINATION SERIES



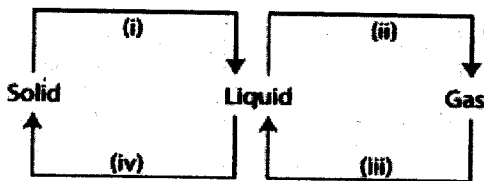
STANDARD 7 – 2021

SCIENCE

AF2005

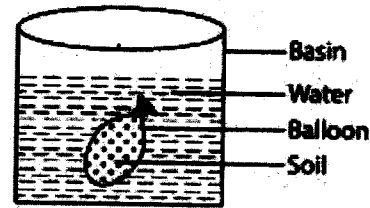
Time: 1 hour 40 minutes

- The following are functions of the largest component of blood. Which one is NOT? It: -
 - Allows blood to freely in our bodies
 - Regulates body temperature
 - Helps in the clotting of blood
 - Acts as a solvent for other substances
- Which one of the following is not a communicable disease?
 - Tuberculosis
 - Polio
 - Typhoid
 - Malaria
- One morning, Robert complained of aching joints, fever and sweating. Which of the following diseases could he be suffering from?
 - Malaria
 - Typhoid
 - Cholera
 - Bilharzia
- Which one of the following is not the function of the micropyle in a seed?
 - It allows the radicle to come out during germination
 - It allows the plumule to come out during germination
 - It allows entry of water during germination
 - It allows entry of air during germination
- The processes i, ii, iii and iv on the chart below bring about changes in states of matter



- Which processes shows the decrease of temperature?
- i and ii
 - i and iv
 - ii and iii
 - iii and iv
- Which of the following parts of digestive system is NOT correctly matched with its function?
 - Stomach - absorption of glucose
 - Colon - absorption of food
 - Mouth - breaking down of food
 - Ileum - absorption of digested food

- Michelle, a grade 4 pupil did the following experiment to investigate factors that affect sinking and floating as shown below



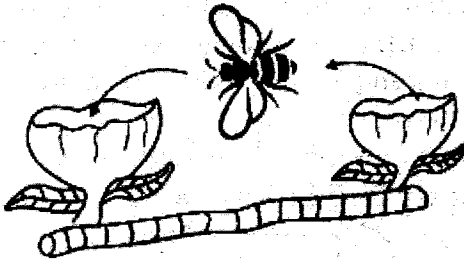
Why did the balloon sink?

- The shape of the balloon changed
 - The weight of the balloon increased
 - The mass of the balloon decreased
 - The size of the balloon decreased
- A patient with weak bones that cannot support the body should be given foods rich in all the following nutrients EXCEPT: -
 - Phosphorus
 - Iron
 - Calcium
 - Vitamin D
 - A boy slept on the floor next to a burning jiko. The heat reached the boy through: -
 - Conduction
 - Convection
 - Condensation
 - Radiation
 - In which part of breathing system does the absorption of air take place?
 - Nose
 - Bronchioles
 - Bronchi
 - Alveoli
 - Which one of the following diseases is likely to occur in adolescent girls than in boys?
 - Rickets
 - Marasmus
 - Anemia
 - Kwashiorkor
 - In which stage of HIV is a person more likely to be attacked by opportunistic diseases?
 - 3rd stage
 - 4th stage
 - 2nd stage
 - 1st stage
 - What happens to the body temperature of a lizard when it basks on a warm rock?
 - Rises
 - Rises then fall
 - Remains constant
 - Lowers

14. Which one of the following is the MOST suitable method of controlling weeds in a maize plantation?

- A. Digging out C. Uprooting
B. Mulching D. Use of chemicals

15. Which type of pollination is shown in the figure drawn below?



- A. Insect pollination C. wind pollination
B. Cross pollination D. self-pollination

16. Which one of the following is the most effective way of controlling spread of HIV/AIDS among couples?

- A. Abstinence from sex
B. Faithfulness
C. Avoid deep kissing
D. Avoid sharing sharp piercing tools

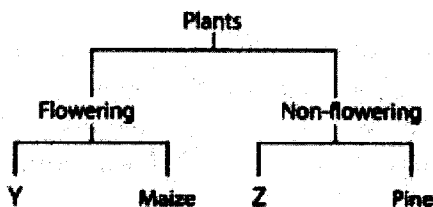
17. Which one of the following venereal diseases is NOT caused by bacteria?

- A. Syphilis C. Genital herpes
B. Chancroid D. Gonorrhoea

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

- A. Use of low temperature C. Refrigeration
B. Canning D. Use of honey

19. The chart below shows a simple classification of plants.



Which one of the following pairs represents y and z respectively?

- | | |
|---------------|---------|
| Y | Z |
| A. Carrots | Sisal |
| B. Moss | Cypress |
| C. Sugar cane | Fern |
| D. Kale | Onion |

20. Which of the following mammals does NOT give birth?

- A. Bat
B. Whale
C. Lion
D. Duck-billed platypus

21. Sound travels least in: -

- A. Gases C. Solids
B. Liquids D. Vacuum

22. Which one of the following is NOT a change of state of matter?

- A. Melting of ice to water
B. Freezing of water to ice
C. Boiling of water to steam
D. Crashing of stone to powder form

23. Which of the following processes can be used to separate a mixture of soil, salt and iron fillings?

- A. Magnetism – decantation – filtration – evaporation
B. Dissolving – decantation – magnetism – evaporation
C. Magnetism – dissolving – filtration – evaporation
D. Dissolving – magnetism – filtration – evaporation

24. The most effective way of controlling the spread of bilharzia is: -

- A. Proper disposal of human waste
B. Washing hands before eating
C. Boiling drinking water
D. Treating drinking water with chlorine

25. The third DPT vaccine is given at age: -

- A. 6 weeks C. 14 weeks
B. 9 months D. 10 weeks

26. The pistil of a flower is made up of: -

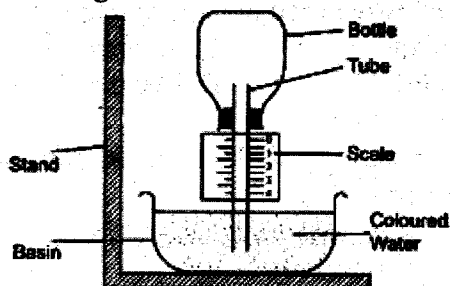
- A. Stigma, filament, ovules, ovary.
B. Anther, filament, style, stigma.
C. Stigma, style, ovules, ovary.
D. Style, anther, ovary, ovules

27. Which one of the following food preservation methods does NOT involve removal of moisture from the food?

- A. Smoking C. Drying
B. Salting D. Canning

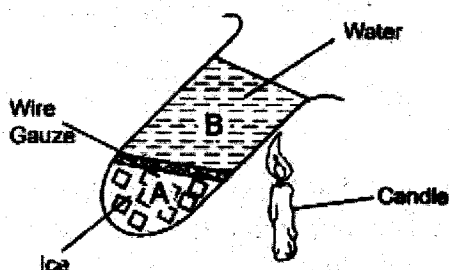
28. Which one of the following statements about methods of grazing is CORRECT?
- A. Herding is a form of rotational grazing
 - B. Stall feeding requires a lot of land
 - C. Herding is suitable for densely populated areas
 - D. Stall feeding is expensive to start and maintain

29. The diagram below shows an air thermometer



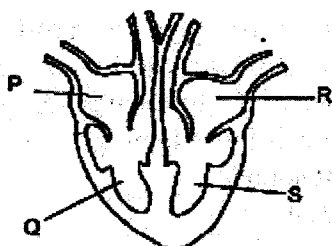
If the instrument is moved from the class to the field on a hot day, the following will happen EXCEPT

- A. Air in the bottle will expand
 - B. Water level in the basin will rise
 - C. Colored water in the tube will rise
 - D. There will be high reading on the scale
30. Mutisya carried out the experiment shown below;



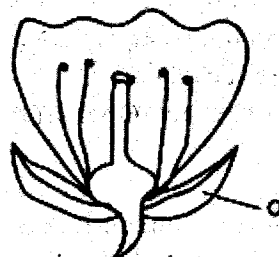
What observation did he make?

- A. Water boiled at A and not at B
 - B. Water boiled at both A and B
 - C. Water boiled at B and not A
 - D. Water did not boil at all
31. The diagram below shows parts of the human heart



Which of the labelled parts would first receive poisoned blood from the poisonous gas?

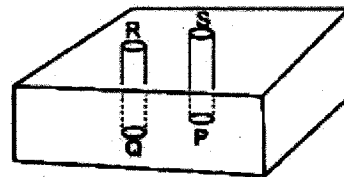
- A. Q
 - B. R
 - C. P
 - D. S
32. Which one of the following conditions is NOT necessary for germination?
- A. Warmth
 - B. Air
 - C. Soil
 - D. Moisture
33. Which of the following is the MAIN difference between a seed and a fruit?
- A. A seed is fertilized ovary
 - B. A seed has two scars
 - C. A fruit has one scar
 - D. A fruit has two scars
34. Which of the following crop pest causes damage to crops by sucking the sap?
- A. Weevils
 - B. Stalk borer
 - C. Armyworms
 - D. Aphids
35. The main reason why it is advisable to spray crops in the direction of the wind to avoid: -
- A. Inhaling the chemicals
 - B. Wastage of chemicals
 - C. Polluting the air
 - D. Chemicals getting into contact with the skin
36. Soil erosion on steep ground is best controlled by?
- A. Gabions
 - B. Terracing
 - C. Crop rotation
 - D. Mulching
37. The diagram below represents a flower. What is the function of the part labelled Q?



- A. Supports the anthers
- B. Attracts insects
- C. Protects the flower while in bud stage
- D. Support the ovary during fertilization

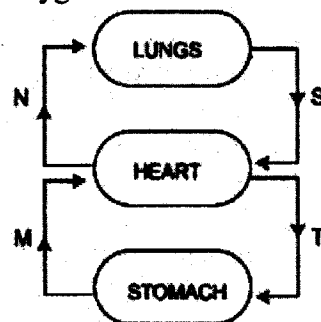
38. Three of the following are characteristics of amphibians. Which one is NOT?
 A. Lay eggs
 B. They are covered with moist skin
 C. They have scales
 D. They are cold blooded
39. Which one of the following consists of a pair of body organs that assists in the digestion of food?
 A. Trachea and bronchus
 B. Liver and heart
 C. Liver and large intestines
 D. Liver and pancreas
40. Bats, sea seals and duck-billed platypus are similar in that all: -
 A. Have scales on their bodies
 B. Have constant body temperature
 C. Are cold blooded
 D. Are flying mammals
41. Which one of the following is not a major component of environment?
 A. Light
 B. Animals
 C. Water
 D. air
42. Which one of these is not a major plant nutrient?
 A. Zinc
 B. Sulphur
 C. Phosphorus
 D. Potassium
43. Which one of the following sets of animal feeds mainly provide a diet of proteins, carbohydrates and fats respectively?
 A. Desmodium, clover, sweet potato vines
 B. Lucerne, desmodium, Napier grass
 C. Lucerne, maize stalks, oats
 D. Napier grass, sweet potato vines, maize stalks
44. Which of the following pairs of levers has the position of load, fulcrum and effort as a fishing rod when in use?
 A. Spade and tongs
 B. Bottle opener and nutcracker
 C. Door hinges and pliers
 D. Scissors and claw hammer

45. Which one of the following planets are in the second, fifth and eighth positions respectively?
 A. Mars, Saturn, Neptune.
 B. Uranus, Jupiter, Saturn.
 C. Venus, Jupiter, Neptune.
 D. Earth, Saturn, Uranus.
46. Which one of the following drugs can be used as a depressant when used in large amounts?
 A. Alcohol
 B. Heroin
 C. Madrax
 D. Cocaine
47. A farmer practicing stall feeding is likely to feed animals on: -
 A. Pasture and concentrates
 B. Concentrates only
 C. Pasture and fodder
 D. Fodder and concentrates
48. The following diagram represents a set up that can be used to demonstrate heat transfer in air



For the demonstration to work a burning candle must be placed at: -

- A. S
 B. Q
 C. R
 D. P
49. The diagram below shows the circulatory system. Which pair of blood vessels carry deoxygenated blood?



- A. N and T
 B. M and N
 C. M and S
 D. T and S

50. In a certain investigation, pupils set a different position around a pupil who was blowing a whistle. Which one of the following aspects of sound were the pupils investigating?
 A. Loud and soft sound
 B. Sound pollution
 C. Direction of sound
 D. Special sounds