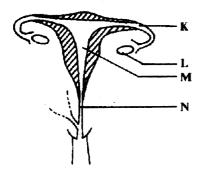
## MANYAM FRANCHISED TEST

## **SCIENCE KCPE 2006**

- 1. Sweat glands in the skin of a human body are located in the
  - A. epidermis
  - B. dermis
  - C. pores
  - D. oil glands.
- 2. Which one of the following parts of a human body produces urine?
  - A. Bladder.
  - B. Ureter.
  - C. Kidney.
  - D. Urethra.
- 3. The diagram below represents the reproductive system in the female human body.



Fertilization takes place in the part labelled

- A. K
- B. L
- C. M
- D. N.
- 4. The following are some of the physical changes that take place during adolescence.
  - (i) Hips become broader.
  - (ii) Chest and shoulders become broader.
  - (iii) Pimples may appear on the face.
  - (iv) Voice breaks.
  - (v) Pubic hair grows.

Which of the changes take place in a girl?

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

- 5. Which one of the following groups consists of only diseases that are immunisable?
  - A. Whooping Cough, Tuberculosis, Tetanus.
  - B. Measles, Malaria, Diphtheria.
  - C. Dysentary, Hepatitis B, Poliomyelitis.
  - D. Bilharzia, Yellow Fever, Cholera.
- 6. The following are stages of HIV infection:
  - (i) Window stage.
  - (ii) Symptoms.
  - (iii) Full blown.
  - (iv) Incubation.

Which one of the following is the CORRECT order of the stages?

- A. (ii) (i) (iii) (iv).
- B. (iv) (ii) (iii) (i).
- C. (i) (iv) (ii) (iii).
- D. (i) (iii) (iv) (ii).
- 7. The following are effects of drug abuse:
  - (i) Rape.
  - (ii) Addiction.
  - (iii) Lack of concentration.
  - (iv) Truancy.
  - (v) Impaired judgement.

Which of them are all health effects?

- A. (i) (ii) (iii).
- B. (ii) (iii) (iv).
- C. (i) (iv) (v).
- D. (ii) (iii) (v).
- One evening, a pupil noticed a bright heavenly body that was not twinkling. The heavenly body was most likely
  - A. Saturn
  - B. Uranus
  - C. Venus
  - D. Neptune.
- The reason for using a biro pen cap as a pivot in the construction of an improvised wind vane is to make the arrow
  - A. rotate freely
  - B. balance on the stand
  - C. tail show the direction of wind
  - D. head heavy.
- 10. Which one of the following statements is TRUE about the planet Mars? It is
  - A. nearest to the sun
  - B. the brightest planet
  - C. nearest to the earth
  - D. the smallest planet.

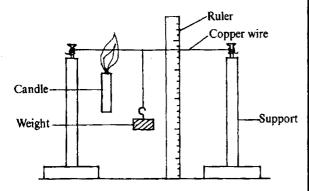
- 11. Which one of the following is a leguminous plant?
  - A. Cabbage.
  - B. Maize.
  - C. Groundnut.
  - D. Tomato.
- 12. Fertilization in plants takes place when
  - A. a pollen tube enters the ovule
  - B. reproductive cells in pollen grain and ovule fuse
  - C. a pollen grain falls on the stigma and germinates
  - D. a pollen tube enters the ovary.
- 13. Which of the following groups only consists of non-flowering plants?
  - A. Pine, Cedar, Cypress.
  - B. Sugar cane, Sisal, Onion.
  - C. Cedar, Moss, Kale.
  - D. Carrot, Cassava, Cactus.
- 14. Which of the following groups of plants have the same type of root system?
  - A. Tomato, Maize, Peas.
  - B. Bean, Black jack, Cabbage.
  - C. Groundnuts, Rice, Sugar cane.
  - D. Millet, Cassava, Carrot.
- 15. Which one of the following parasites destroys wool in sheep?
  - A. Mites.
  - B. Lice.
  - C. Fleas.
  - D. Ticks.
- 16. The toothless gap in the lower jaw of herbivores is for
  - A. turning plant material in the mouth for proper chewing
  - B. holding food material
  - C. allowing space for more food
  - D. preventing the animals from biting their tongues.
- 17. Which one of the following animals has the same number of legs as the tick?
  - A. Weevil,
  - B. Crab.
  - C. Scorpion.
  - D. Cockroach.
- 18. Which one of the following is a filter feeder?
  - A. Kingfisher.
  - B. Hawk.
  - C. Duck.
  - D. Sunbird.

- 19. Which one of the following is NOT an immediate sign of ill health in livestock?
  - A. Coughing.
  - B. Blood in stool.
  - C. Rough coat.
  - D. Loss of weight.
- 20. Which one of the following is a method of softening hard water?
  - A. Filtering.
  - B. Boiling.
  - C. Decanting.
  - D. Sieving.
- 21. Which one of the following practices will help to prevent the spread of cholera?
  - A. Spraying chemicals in stagnant water.
  - Wearing protective shoes when passing through water.
  - C. Drinking filtered water.
  - D. Covering pit latrines after use.
- 22. Which one of the following NEED NOT be the same when investigating drainage in different types of soil?
  - A. Amount of soil in the funnels.
  - B. Size of funnels.
  - C. Size of bottles collecting the draining water.
  - D. Amount of water added to the funnels.
- 23. The following are effects of soil erosion:
  - (i) Small holes in the ground.
  - (ii) Top layer of soil missing.
  - (iii) Small and shallow channels in the ground.
  - (iv) V-shaped trenches in the ground.

Which effects are as a result of splash and rill types of erosion?

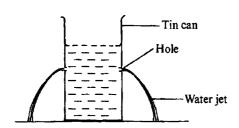
- A. (i) and (iv).
- B. (i) and (iii).
- C. (ii) and (iii).
- D. (ii) and (iv).
- 24. Which of the following liquids mix?
  - A. Kerosene and water.
  - B. Water and milk.
  - C. Milk and kerosene.
  - D. Cooking oil and milk.

25. The diagram below represents a setup that can be used to demonstrate a certain property of metals.



Which property of metals was being demonstrated?

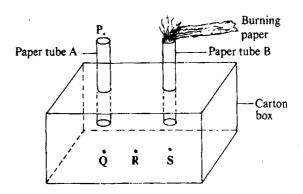
- A. Metals expand when heated.
- B. Metals bend when heated.
- C. Solids conduct heat.
- D. Hot metals are pulled down by weight.
- 26. A pupil investigating a certain aspect of pressure in a liquid used a setup shown in the diagram below.



What conclusion could the pupil make from the investigation?

- A. Air exerts pressure on the surface of a liquid.
- B. Pressure in a liquid increases with depth.
- C. Pressure in a liquid is equal at the same depth.
- D. Pressure in a liquid is exerted on the sides only.
- 27. The temperature at which a substance freezes is the same temperature at which the substance
  - A. condenses
  - B. evaporates
  - C. boils
  - D. melts.
- 28. Which one of the following consists only of substances that have no definite shape but have definite volume?
  - A. Stone, kerosene, carbon dioxide.
  - B. Oil, toothpaste, glue.
  - C. Clay, flour, cement.
  - D. Nitrogen, oxygen, water vapour.

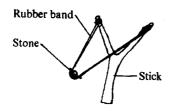
29. The diagram below represents a setup that can be used to demonstrate heat transfer in air.



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

- A. P
- B. Q
- C. R
- D. **S**.
- 30. The percentage of the component of air that is fixed by bacteria in root nodules to make nutrients for the plant is
  - A. 0.03%
  - B. 0.97%
  - C. 21%
  - D. 78%.
- 31. Which one of the following is the last step when separating a mixture of sand and salt?
  - A. Dissolving.
  - B. Filtering.
  - C. Evaporating.
  - D. Decanting.

32. The diagram below shows a stone being thrown using a catapult.



The form of energy in the rubber band before the stone is released is

- A. kinetic
- B. potential
- C. chemical
- D. sound.
- 33. Which one of the following is CORRECT about a solar heater? A solar heater changes
  - A. heat energy to electrical energy
  - B. light energy to electrical energy
  - C. chemical energy to heat energy
  - D. light energy to heat energy.
- 34. Tall buildings are fitted with sharp pointed metal rods at their tops and connected to the ground. The rods are for
  - A. protecting the buildings against lightning
  - B. protecting electricity users from being electrocuted
  - C. fixing aerials for radios and televisions
  - D. allowing expansion of walls during hot weather.
- 35. Which one of the following is TRUE about the rainbow? It forms
  - A. before heavy rainfall
  - B. when it rains while the sun is shining
  - C. when the sky is covered with thick clouds
  - D. when it rains in the afternoon.
- 36. Which one of the following energy transformations takes place when a radio that uses cells is operating?
  - A. Chemical → electrical → magnetic → kinetic → sound.
  - B. Magnetic → electrical → kinetic → chemical → sound.
  - C. Electrical → chemical → kinetic → magnetic → sound.
  - D. Kinetic → chemical → electrical → magnetic → sound.
- 37. Which one of the following sources of energy DOES NOT contain chemical energy?
  - A. Car battery.
  - B. Bicycle dynamo.
  - C. Food.
  - D. Firewood.

- 38. Heat reaches the feet of a person seated by the side of a fire by
  - A. conduction and convection
  - B. radiation only
  - C. convection only
  - D. radiation and convection.
- 39. Which one of the following DOES NOT pollute the air?
  - A. Exhaust gases from aeroplanes.
  - B. Smoke from burning charcoal.
  - C. Smoke from burning domestic wastes.
  - D. Gases from decaying animals.
- 40. The MAIN reason why it is advisable to spray crops in the direction of the wind is to avoid
  - A. the chemicals getting into contact with the skin
  - B. wastage of chemicals
  - C. polluting the air
  - D. inhaling the chemicals.
- 41. The following signs and symptoms were observed in a certain child:
  - (i) Thin and weak.
  - (ii) Wrinkled face.
  - (iii) Pot bellied.
  - (iv) Hungry and crying a lot.

The child was most likely suffering from

- A. anaemia
- B. rickets
- C. kwashiorkor
- D. marasmus.
- 42. Which one of the following groups consists only of foodstuffs that protect the body against diseases?
  - A. Lemon, cabbage, carrot.
  - B. Beans, groundnuts, fish.
  - C. Maize, potatoes, rice.
  - D. Meat, orange, spinach.
- 43. The purpose of salt in food preservation is to
  - A. remove water
  - B. add flavour
  - C. remove air
  - D. lower the temperature.
- 44. The most likely reason why some expectant mothers crave for soil is to
  - A. increase breast milk production after delivery
  - B. increase appetite
  - C. help in digestion of food
  - D. provide sufficient mineral nutrients.
- 45. Which one of the following levers when in use has the position of the effort between the load and the fulcrum?
  - A. Spade.
  - B. Wheelbarrow.
  - C. Claw hammer.
  - D. Crowbar.

- 46. A single fixed pulley
  - A. changes direction of force
  - B. increases effort distance
  - C. reduces effort required
  - D. reduces load distance.
- 47. The diagram below represents a tyre of a vehicle.



The purpose of treads in the vehicle tyre is to

- A. make them last longer
- B. increase grip on the road
- C. reduce surface area
- D. make them lighter.
- **48.** The following activities are carried out when making a beam balance but not in the correct order:
  - (i) Suspend the arm to find balance point and mark.
  - (ii) Make a base, a stand and the arm.
  - (iii) Fix the stand and the arm to the base.
  - (iv) Suspend tins on both sides of the arm.

Which one of the following is the **CORRECT** order in which the activities are carried out?

- A. (iii) (i) (ii) (iv).
- B. (ii) (i) (iii) (iv).
- C. (iii) (ii) (iv) (i).
- D. (ii) (i) (iv) (iii).
- 49. Which one of the following statements is CORRECT about a stone thrown a few metres directly upwards by a passenger in a moving lorry? The stone will fall
  - A. in front of the person
  - B. behind the person
  - C. on the person
  - D. behind the lorry.

50. The diagram below represents a certain weed.



The weed is

- A. Pigweed
- B. Mexican marigold
- C. Black jack
- D. Oxalis.