1. In human body digested food is absorbed in
   A. Stomach
   B. Large intestine
   C. Rectum
   D. Small intestine

2. The diagram below represents a certain type of human tooth.

   The function of the tooth is
   A. gripping and tearing
   B. tearing and grinding
   C. crushing and grinding
   D. biting and crushing

3. A certain person looked healthy and strong but tested positive for HIV/AIDS. In which one of the following stages of HIV/AIDS was the person likely to be?
   A. Window
   B. Incubation
   C. Symptomatic
   D. Full blown

4. The following are sexually transmitted infections except
   A. syphilis
   B. gonorrhea
   C. bilharzia
   D. chancroid

5. Which one of the following pairs consists of planets with the longest orbits?
   A. Mars and mercury
   B. Venus and Jupiter
   C. Earth and Saturn
   D. Neptune and Uranus

6. In order to make a certain weather instrument, a pupil assembled the following materials:
   Glass bottle, ink, biro pen tube, nails, Manila paper and water.
   Which one of the following instrument was the pupil likely to make?
   A. Wind vane
   B. Liquid thermometer

7. The following are some adaptations of plants that grow in wet environment except having
   A. large flat leaves
   B. leaves with waxy upper surface
   C. thick leaf cuticle
   D. an increased number of stomata

8. Which one of the following groups consists only of field pests?
   A. Weavils, aphids and weaver birds
   B. Aphids, weaver birds and white ants
   C. Weavils, white ants and stalkborer
   D. Aphids, weaver birds and stalkborer

9. Which one of the following is a characteristic of amphibians?
   A. Lay their eggs on land
   B. Live partly in water
   C. Have moist skin with scales
   D. Adults breath through gills

10. The diagram below represents a beak of a certain bird

    The bird represented is
    A. filter feeder
    B. grain eater
    C. nectar feeder
    D. fish eater

11. In which of the following activities is water used in industries?
    A. Cleaning tools and equipment
    B. Preparation of soft drinks
    C. Washing cars
    D. Watering plants

12. Which one of the following is an advantage of hard water?
    A. Saves soap during washing
    B. Lathers easily with soap
    C. Forms scum with soap
    D. Suitable for drinking
13. Mary and John were playing on the see-saw as shown in the diagram below.

In order to balance on the see-saw
A. John should move away from pivot
B. Mary should move away from pivot
C. Move the pivot towards John
D. Move the pivot towards Mary.

14. The following are methods of maintaining simple tools:
   (i) Cleaning after use
   (ii) Proper storage
   (iii) Sharpening cutting edges
   (iv) Proper use of tools.

Which pair consists **only** of methods for safety from accidents?
A. (ii) and (iv).
B. (i) and (iv).
C. (ii) and (iii).
D. (i) and (iii).

15. Which one of the following components of air is used for preserving soft drinks?
   A. Carbon dioxide.
   B. Nitrogen.
   C. Oxygen.
   D. Inert gases.

16. Which one of the following pairs of processes are as a result of increase and decrease in temperature respectively?

<table>
<thead>
<tr>
<th>Increase</th>
<th>Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freezing</td>
<td>Condensation</td>
</tr>
<tr>
<td>Expansion</td>
<td>Evaporation</td>
</tr>
<tr>
<td>Contraction</td>
<td>Expansion</td>
</tr>
<tr>
<td>Melting</td>
<td>Condensation</td>
</tr>
</tbody>
</table>

17. Which one of the following statements is true about liquid and gases?
   A. Liquid has a definite volume.
   B. Gases have definite volume.

18. A mixture of salt solution, maize grain and iron filings can be separated by
   A. filtering, use of magnet, evaporation
   B. decanting, picking, winnowing
   C. filtering, decanting, evaporation
   D. winnowing, use of magnet, picking.

19. The energy transformation that takes place when a torch that uses batteries is switched on is
   A. electrical $\rightarrow$ chemical $\rightarrow$ heat $\rightarrow$ light
   B. electrical $\rightarrow$ heat $\rightarrow$ chemical $\rightarrow$ light
   C. chemical $\rightarrow$ electrical $\rightarrow$ light $\rightarrow$ heat
   D. chemical $\rightarrow$ electrical $\rightarrow$ heat $\rightarrow$ light

20. Formation of rainbow can be demonstrated by the following activities **except** when
   A. observing the sun through a horizontally held transparent biro pen casing
   B. placing a mirror in water to face the sun
   C. spraying water in the air from the mouth in bright sunshine
   D. placing a biro pen casing on a water in a glass container.

21. Which one of the following is a source of light
   A. Torch.
   B. Dam.
   C. Solar panel.
   D. Biogas plant.

22. Which one of the following consists of foods that are **mainly** for body building?
   A. beef, cassava, potatoes,
   B. mutton, maize, pawpaw,
   C. peas, beans, eggs,
   D. carrot, bananas, tomatoes.

23. Which one of the following groups of the symptoms is **correctly** matched with the deficiency disease?

<table>
<thead>
<tr>
<th>Rickets</th>
<th>Anaemia</th>
<th>Kwashiorkor</th>
</tr>
</thead>
</table>
   | A. Bowlegged. | brown hair. | wrinkled face.
   | B. Knock kneed. pale eyes. potbellied.
   | C. Rapid heartbeat. potbellied. breathlessness.
   | D. Brown hair. wrinkled face. bowlegged.
24. Which one of the following pair consists only of components of environment that produce carbon dioxide?
   A. Air and plants.
   B. Animal and plants.
   C. Water and air.
   D. Soil and animal.

25. Use of excess fertilizer will mainly pollute
   A. Soil and water
   B. Water only
   C. Soil and air
   D. Soil only.

26. Which one of the following component of blood is correctly matched with its function?

<table>
<thead>
<tr>
<th>Blood component</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red blood cells</td>
<td>clotting of blood.</td>
</tr>
<tr>
<td>White blood cells</td>
<td>transport oxygen.</td>
</tr>
<tr>
<td>Platelets</td>
<td>fight germs.</td>
</tr>
<tr>
<td>Plasma</td>
<td>transport food.</td>
</tr>
</tbody>
</table>

27. The following are some effects of drug abuse:
   (i) Rape
   (ii) Addiction
   (iii) Truancy
   (iv) Impaired judgment
   (v) Drug induced accident.

   Which one of the following consists only of social effects?
   A. (i) (ii) (iv).
   B. (ii) (iii) (iv).
   C. (i) (iii) (v).
   D. (i) (iv) (v).

28. Pupils constructed a weather instrument shown below.

   ![Weather Instrument Diagram]

   SMARTWAYS K.C.P.E BOOSTER

29. Which one of the following pairs consists only of plants that directly feed on the insects?
   A. Pitcher plant and sundew.
   B. Mushroom and butter wort.
   C. Sunflower and pitcher plant.
   D. Sundew and toadstool.

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

   ![Plant Classification Diagram]

   Which one of the following pairs represents Y and Z
   A. Carrots and Sisal.
   B. Kale and Onion.
   C. Moss and Cypress.
   D. Sugar cane and fern.

31. Which one of the following pair consists only of farm animals that produce mutton?
   A. Cow and goat.
   B. Goat and sheep.
   C. Cow and sheep.
   D. Sheep and pig.

32. The following are some characteristics of animals:
   (i) Varying body temperatures.
   (ii) Lay eggs.
   (iii) Have scales.
   (iv) Have a backbone.

   Which two characteristics are for both toad and duck?
   A. (i) and (iii)
   B. (i) and (ii)
   C. (ii) and (iv)
   D. (iii) and (iv)
33. The method of grazing that would require the largest piece of land to practice is:
   A. herding
   B. stall feeding
   C. tethering
   D. paddocking.

34. Which one of the following pairs of machines consists only of inclined planes?
   A. Ladder and staircase.
   B. Staircase and wheelbarrow.
   C. Claw hammer and ladder.
   D. Spade and crawl bar.

35. In which one of the following is friction an advantage?
   A. Skating on ice.
   B. Swimming in water.
   C. Production of heat in moving parts.
   D. Braking of a bicycle on a road.

36. In an investigation on factors affecting sinking and floating pupils carried out the following activities:
   (i) placed a bottle top in water,
   (ii) made the same bottle top into a ball and placed it on water.
   Which one of the following factors was the pupils investigating?
   A. Size.
   B. Shape.
   C. Type of material.
   D. Mass.

37. Heat transfer in liquids and gases mainly takes place through
   A. radiation
   B. convection and conduction
   C. convection
   D. conduction and radiation.

38. Which one of the following is a transparent material?
   A. Kerosene.
   B. Mirror.
   C. Frosted glass.
   D. White paper.

39. Which one of the following is the safety measure against lighting when it is raining?
   A. Leaning against wall.
   B. Walking on open areas.
   C. Wearing rubber shoes.
   D. Using an umbrella.

40. Which one of the following nutrients is required for the formation of the blood in expectant mothers?
   A. Vitamin D.
   B. Calcium.
   C. Phosphorus.
   D. Iron.

41. Which one of the following soil conservation measures is the least suitable on a large piece of land?
   A. Terracing.
   B. Mulching.
   C. Tree planting.
   D. Contour farming.

42. When pupils heated some garden soil, smoke was produced. The observation made indicated the presence of
   A. organic matter
   B. air
   C. mineral particles
   D. water.

43. The following are some characteristics of soil
   (i) fine particles.
   (ii) cracks when dry.
   (iii) poor drainage.
   (iv) good capillarity.
   The characteristics are for
   A. loam soil only
   B. loam and sand soil
   C. clay soil only
   D. loam and clay soil.

44. Pupils went for a nature walk and observed a plant with yellow fruits and thorns on the stem. The plant observed was likely to be
   A. Mexican marigold
   B. pig weed
   C. black jack
   D. sodom apple.

45. Which one of the following groups only consists of materials that are non-magnetic?
   A. Piece of glass, silver coin, cello tape.
   B. Nail, steel, wool, spoon.
   C. Scissors, razor blade, piece of glass.
   D. Staple pins, sowing needle, aluminium.

46. Which one of the following groups consists only of gases that comprise 0.03, 0.97 and 21 percentage in air respectively?
   A. Inert gases, oxygen and nitrogen.
   B. Carbon dioxide, inert gases and oxygen.
   C. Inert gases, carbon dioxide and nitrogen.
   D. Carbon dioxide, oxygen and nitrogen.
47. Which one of the following is not a component of soil?
A. Rock particles.
B. Water.
C. Plant.
D. Air.

48. The diagram below represents a setup that can be used to investigate good and poor conductors of electricity. Which one of the following materials when used to connect wires at point P would make the bulb not light?

- A. Pencil.
- B. Aluminium foil.
- C. Steel wool.
- D. Rubber band.

49. The diagram below represents a claw hammer in use. Which pair of the positions V, W, X and Y represents the load and pivot?
A. V and Y.
B. W and X.
C. V and X.
D. W and Y.