1. Which of the following is not part of blood component?
   A. Plasma        B. White blood cells
   C. Platelets     D. Veins

2. Why does the heart pump blood to the lungs?
   A. To receive carbon dioxide
   B. To be distributed to other parts of the body
   C. To receive oxygen
   D. To store it

3. The heart of an adult person beats at an average of ______
   A. 72 times per minute
   B. 60 times per minute
   C. 72 times per hour
   D. 60 times per hour

4. The following are effects of forces on objects. Which one is not?
   A. Stretch objects
   B. Cause objects to move
   C. Can break objects
   D. Change objects texture

5. Food should be properly stored in order to protect it from
   A. Physical damage
   B. Contamination
   C. Climatic effects
   D. Its usual taste

6. Which of the following best defines what soil erosion is?
   A. Use of fertilizers to maintain soil fertility
   B. Formation of soils by the erosion of rocks
   C. Movement of soil from one place to another
   D. Planting of trees near rivers

7. The following are ways of preventing spread of cholera and typhoid. Which one is not?
   A. Maintaining proper hygiene
   B. Using safe water
   C. Maintaining proper sanitation
   D. Sleeping under mosquito nets

8. Flowers that are pollinated by insects have the following characteristics except
   A. have brightly coloured petals
   B. have nectar
   C. stigma are large and feathery
   D. they are scented

The diagram below shows circulatory system. Use it to answer questions 9 - 12

9. Name the blood vessels marked J and M respectively.
   A. Vena cava, Aorta
   B. Vena cava, Pulmonary Artery
   C. Vena cava, Pulmonary vein
   D. Pulmonary vein, Pulmonary artery

10. What is the function of the parts marked N?
    A. Pump blood to the lungs
    B. Sieve blood from the body
    C. Prevents back flow of blood
    D. Separates oxygenated and deoxygenated blood

11. Which chamber pumps blood to all parts of the body?
    A. E    B. F    C. G    D. H

12. The chamber marked E is called ______
    A. Left ventricle    B. Right auricle
    C. Right ventricle    D. Left auricle
13. The following are characteristics of birds, which one is not?
   A. Are warm blooded
   B. Have scales on the legs
   C. Lay eggs
   D. Temperature vary with the surrounding

14. Name the parts W, X, Y, and Z of the seed shown below respectively.

15. Which two parts makes up the embryo?
   A. W and Y
   B. X and Z
   C. W and X
   D. X and Y

16. There are three types of blood vessels which of the following is not?
   A. Valves
   B. Capillaries
   C. Veins
   D. Arteries

17. Name the Fourth, Fifth and Seventh planets in order from the sun?
   A. Mars, Jupiter, Uranus
   B. Mars, Jupiter, Saturn
   C. Saturn, Uranus, Neptune
   D. Venus, Earth, Mars

18. Which method of grazing do farmers use a temporary fence to control the movement of animals?
   A. Strip
   B. Paddocking
   C. Tethering
   D. Stall

19. The following are causes of soil erosion, which one does not?
   A. Cutting of vegetation cover
   B. Cultivating along slopes
   C. Keeping too few animals on a piece of land
   D. Cultivating along river banks

20. Two boys used different pipes to see through as shown below.

   Which of the following statement was their conclusion?
   A. Light travels in a straight line
   B. Light is reflected
   C. Pipes are transparent
   D. One can see through curved pipes

21. Which of the following is not true about veins?
   A. Have thin walls
   B. Transports blood under low pressure
   C. Have valves
   D. Are located deep in the muscles

22. Carbon dioxide is used in the following ways except
   A. Preserving of soft drinks
   B. Support burning
   C. To make dry ice
   D. For photosynthesis

23. Which of the following units are used in measuring force?
   A. Newton
   B. Grams
   C. Metres
   D. Hours

The diagram below shows a flower use it to answer questions 24-27

24. Which parts makes up the stamen?
   A. i, iv
   B. i, v, vii
   C. ii, iv
   D. iii, vi
25. Name the parts numbered i and v respectively
   A. Style, Filament
   B. Filament, Style
   C. Style, Anther
   D. Filament, Anther

26. What is the function of the part numbered (ii)
   A. Produce ovules
   B. Produce pollen grains
   C. Pollinates pollen grains
   D. Receives pollen grains

27. What is the function of the part numbered (vi)?
   A. Attract insects
   B. Protects the flower at bud stage
   C. Fertilizes the flower
   D. Supports the flower

28. What is the function of the plasma?
   A. Transports undigested food
   B. Transport waste products from all parts of the body
   C. Helps in sweating
   D. Digests food in the stomach

29. Alice cut herself with a razor blade after sometime the bleeding stopped. This shows the presence of
   A. White blood cells
   B. Red blood cells
   C. Platelets
   D. Valves

30. **Std. 5 pupils made a water thermometer as shown below.**

   ![Diagram of a water thermometer]

   Which mistake did they make?
   A. use a small bottle instead of large
   B. used coloured water instead of clear water
   C. placed the scale wrongly
   D. used ball point tube instead of a straw

31. Which of the following is not a sign in the symptomatic stage of HIV infection?
   A. Loss of appetite in the mouth
   B. Open wounds in the mouth
   C. Persistent cough
   D. Negative HIV presence

32. Which of the digestive points is not correctly matched with its digestive juice?
   A. Stomach - Gastric
   B. Liver - Bile
   C. Ileum - Saliva
   D. Pancreas - Pancreatic

33. Red blood cells contain a red coloured substance known as _______
   A. pigment
   B. haemoglobin
   C. chlorophyll
   D. virus

34. Children in famine stricken areas suffer from Marasmus showing various signs as listed below. Which one is not?
   A. Skin becomes wrinkled
   B. Child often cries alot
   C. Child does not grow well
   D. The child is bow legged

35. The following are modern methods of preserving foods. Which one is not?
   A. Canning and bottling
   B. Smoking
   C. Refrigeration
   D. Addition of chemicals

36. Which of the following is a characteristic of the soil with the highest rate of water retention?
   A. can be used in construction
   B. best in farming
   C. used in modelling
   D. has rough texture

37. Which part of the heart has thicker layers of muscles?
   A. Right atricle
   B. Right ventricle
   C. Left ventricle
   D. Left atricle

38. Which of the following is not a sign to warn you that food is unfit for consumption?
   A. Having the usual taste
   B. Mould growing on the food
   C. Swollen dented cans
   D. Bad smell
39. Std. 6 pupils dropped a coin into a glass of water. It appeared as shown below.

![Diagram showing a coin floating]  

The experiment was testing on the ________
A. Reflection of light  
B. Refraction of the coin  
C. Reflection of the coin  
D. Refraction of light

40. During the construction of a railway line the contractor forgot to leave gaps between rails. Which of the following happened as a result?
A. Rails expanded and bent  
B. Rails contracted and bent  
C. Rails shrunked  
D. Rails became thinner

41. All liquids have the following characteristics except
A. They can flow  
B. They take the shape of the container  
C. They have a fixed volume  
D. They have a fixed shape

42. Which type of soil erosion is caused by raindrops?
A. Splash  
B. Gully  
C. Sheet  
D. Rill

43. Which of the following animal feeds is given to animals to improve the taste of the feeds?
A. Additives  
B. Concentrates  
C. Supplements  
D. Fodder

44. Which condition necessary for germination is being investigated below?

![Diagram showing seeds in water and dry conditions]  

45. Fertilization of ovules in a flower occurs at the ________
A. Stigma  
B. Ovary  
C. Style  
D. Anther

The diagram below shows female reproductive system. Use it to answer questions 46 to 48

![Female reproductive system diagram]

46. Female reproductive cell is produced at the part marked ________
A. E  
B. F  
C. G  
D. H

47. In which part does the fertilized ovum grow until a young one is born?
A. H  
B. F  
C. G  
D. E

48. Name the parts marked E and H respectively
A. Oviduct, Vagina  
B. Ovary, Oviduct  
C. Uterus, Oviduct  
D. Ovary, Vagina

49. Which of the following is a function for stems?
A. Absorbs water and mineral salts  
B. Makes food for the plant  
C. Stores food in some plants  
D. Loses excess water

50. The following are ways of preventing HIV infection except
A. Avoid sexual intercourse for the unmarried persons  
B. Share cutting and piercing instruments  
C. Ensure safe blood transfusion  
D. Avoid contact with fresh blood from other people
42. Four pupils weigh as follows 40kg, 45kg, 38kg and 42kg. Calculate their mean mass.
   A. 40kg  B. 41.25kg  C. 42kg  D. 165kg

43. Loise was sent to buy the following items
   - 3½ kg of sugar @ Sh. 108
   - 2kg packet of flour for Sh. 140
   - 1½ kg of rice @ Shs. 60
She paid using Sh. 1000 note. How much balance was she given?
   A. Sh. 407  B. Sh. 308  C. Sh. 267  D. Sh. 692

44. Calculate the volume of the cuboid below.
   \[2.5 \text{ cm} \times 20 \text{ cm} \times 40 \text{ cm}\]
   A. 20000 cm\(^3\)  B. 2000 cm\(^3\)  C. 400000 cm\(^3\)  D. 60000 cm\(^3\)

45. Solve the equation; \[4(3x + 2) = 18\]
   A. \(\frac{3}{6}\)  B. \(\frac{1}{3}\)  C. \(\frac{2}{1}\)  D. 1

46. The pie chart below shows how Alice spent her day

47. A rectangular field measures 450m by 250m. Calculate the area in hectares?
   A. 112500  B. 112.5  C. 11.25  D. 1.125

48. How many pupils are in the class?
   A. 30  B. 29  C. 26  D. 20

49. If each soda was sold at Shs. 35 how much more was paid for Fanta than Sprite?
   A. Sh. 350  B. Sh. 455  C. Sh. 210  D. Sh. 245

50. Find the sum of the faces, vertices and edges of the cube shown below