



SCIENCE AND TECHNOLOGY

Time: 1 hour 40 minutes



INSTRUCTIONS TO CANDIDATE (Please read these instructions carefully)

1. You have been given this question booklet and a separate answer sheet. The question booklet contains 50 questions.
2. Do any necessary rough work in this booklet.
3. When you have chosen your answer, mark it on the **ANSWER SHEET**, not in this question booklet.

HOW TO USE THE ANSWER SHEET

4. Use an ordinary pencil only.
5. Make sure that you have written on the answer sheet:
YOUR ASSESSMENT NO:
YOUR NAME
NAME OF YOUR SCHOOL
6. By drawing a **dark line** inside the correct numbered boxes mark your full Index Number (i.e. School Code Number) in the grid near the top of the answer sheet.
7. Do not make any marks outside the boxes.
8. Keep the sheet as clean as possible and do not fold it.
9. For each of the questions 1-50 four answers are given. The answers are lettered A, B, C and D. In each case only **ONE** of the four answers is correct. Choose the correct answer.
10. On the answer sheet, show the correct answer by drawing a **dark line** inside the box in which the letter you have chosen is written.

Example

In the Question Booklet.

5. Which one of the following is part of a Scratch program?
- A. Word Processor.
 - B. Formular bar.
 - C. Inputs.
 - D. Palette area.

The correct answer is D.

On the answer sheet:

5. [A] [B] [C] [D] **15.** [A] [B] [C] [D] **25.** [A] [B] [C] [D] **35.** [A] [B] [C] [D] **45.** [A] [B] [C] [D]

In the set of boxes numbered **5**, the box with the letter **D** printed in it is marked.

11. Your **dark line** **MUST** be within the box.
12. For each question **ONLY ONE** box is to be marked in each set of four boxes.



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



Which one of the following statements is **not true** about the above tooth?

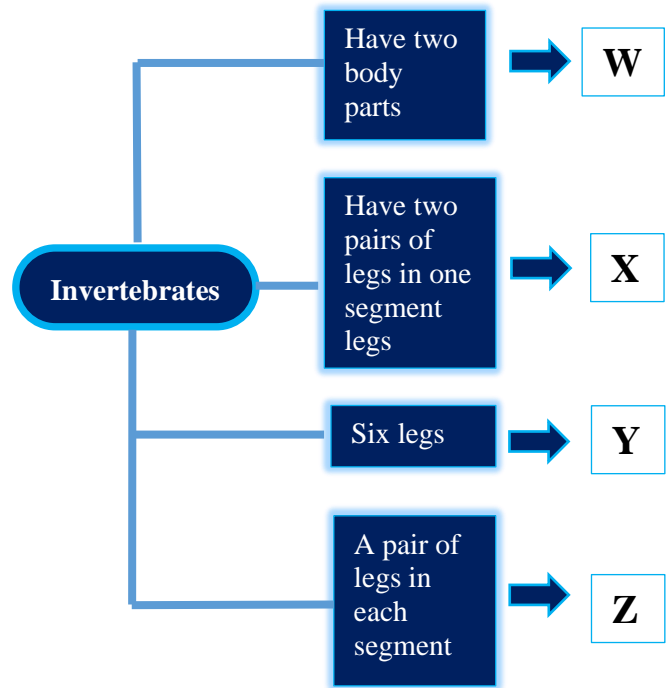
- A. It has an uneven top
 B. It is used for crushing food
 C. It is a deciduous set of teeth
 D. It is used for grinding food
2. The following are some characteristics of certain group of animals:
- (i) Breath by lungs
 (ii) Have scales
 (iii) Lay eggs
 (iv) Have a backbone
- Which one of the following pairs of animals has **all** the characteristics listed above?
- A. Fish and birds
 B. Amphibians and reptiles
 C. Reptiles and birds
 D. Fish and amphibians
3. Which among the following plants has a different root system?
- A. Carrot
 B. Sugarcane
 C. Groundnuts
 D. Peas
4. The following are characteristics of a certain small animal:

- (i) *Three body parts.*
 (ii) *Three pairs of legs.*
 (iii) *Presence of compound eyes.*
 (iv) *No backbone.*

Which of the following small animal has been described above?

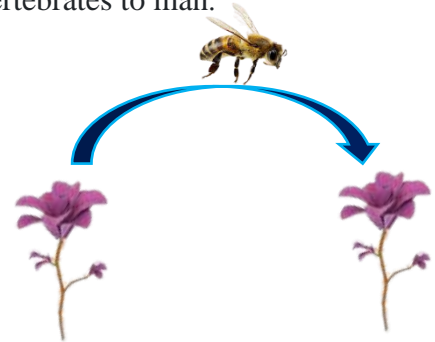
- A. Scorpion
 B. Butterfly
 C. Centipede
 D. Spider

5. The chart below shows a part of the classification of invertebrates. Invertebrates,



In which category is a mite likely to fall?

- A. W
 B. Z
 C. Y
 D. X
6. The illustration below shows an importance of invertebrates to man.

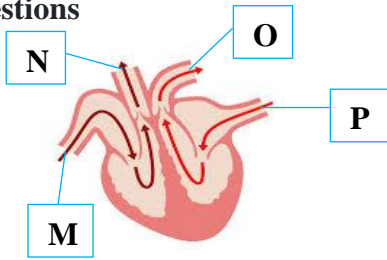


The illustration above shows the importance of invertebrates in

- A. nectar collection.
 B. feeding.
 C. pollination.
 D. decoration.

7. Why do the tanks have taps at the bottom?
This is because
- the water flows freely from the top to the bottom
 - of the force of gravity
 - the pressure of water increases with depth
 - more water will pass through the bottom than at the top

Use the diagram below to answer the following questions



8. The Pulmonary artery is marked with letter?
- O
 - M
 - P
 - N
9. The vessel marked O
- is the main artery.
 - carries deoxygenated blood to the lungs.
 - carries oxygenated blood to the heart for pumping.
 - It is the main vein
10. A small piece of stone sinks in water while a log of wood floats. This is because of the difference in their
- Size
 - Mass
 - Shape
 - Material
11. The following materials were collected by pupils during a Science practical lesson:
- Water in a basin
 - A clean mirror
 - White board

Which aspect of light were they investigating?

- Dispersion of light
 - Refraction of light
 - Reflection of light
 - How light travels
12. During a nature walk, a grade six learner observed a plant with the following characteristics.
- Small in size
 - Has soft green stem of the plants
- Which plant was observed?
- Mint
 - Orange
 - Rose plant
 - Napier grass
13. Blood plasma transports all the following except?
- digested food.
 - waste materials.
 - hormones.
 - hemoglobin.
14. In computing, the part of a computer used for display can also be used
- for processing data.
 - to edit a document.
 - to print a document.
 - for typing.
15. Amanda saw a device like the one shown below in their homestead.



What is the function of the computing gadget?

- Saving typed documents.
- Printing documents.
- Retrieving lost documents.
- Downloading files.

16. When creating a Word document, what is the use of a cursor?
 A. Correcting spelling errors.
 B. Showing the beginning of a text.
 C. Creating spaces between words in a text.
 D. Showing the end of a text



17. A space bar is found on the
 A. mouse.
 B. keyboard.
 C. CPU.
 D. Monitor.



18. When handling computing devices, our hands should be
 A. dry.
 B. smooth.
 C. wet.
 D. visible.

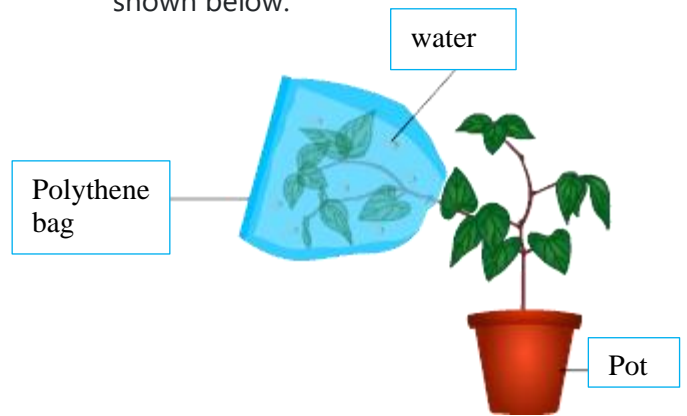
19. Anne and Mary were playing on a seesaw at home. Mary tried to lift Anne as shown below.



From the illustration, it is **true** that;

- A. Both Mary and Anne act as the pivot.
 B. Mary acts as the load.
 C. Mary acts as the effort.
 D. Anne acts as the fulcrum
20. Which of the following is **not** a way of reducing air pollution in the environment?
 A. Sprinkling water on earthen floors before sweeping.
 B. Sprinkling water on dusty grounds.
 C. Fixing chimneys on the kitchen.
 D. Fixing sewage pipes that are leaking.

21. Grade 6 learners performed an experiment as shown below.



From the experiment, the learners concluded that;

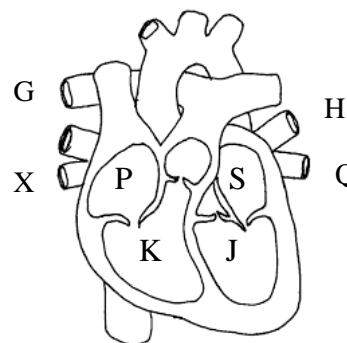
- A. leaves help in photosynthesis.
 B. leaves help in transpiration.
 C. leaves help in respiration.
 D. leaves help in transportation of minerals

22. Kamwana was asked to name the blood component that transports dissolved components around the body. Which answer was he likely to give?

- A. white blood cells
 B. plasma
 C. platelets
 D. red blood cells



23. Blood is pumped to all parts of the body organs by the contraction of the part labeled



- A. J
 B. S
 C. P
 D. K

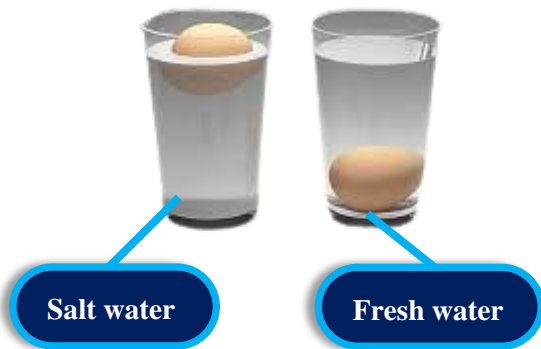
24. Deoxygenated blood is received into the heart through the part labeled

- A. X
- B. Q
- C. H
- D. G

25. Blood is pumped through all the parts of the body through the part labeled;

- A. G
- B. X
- C. Q
- D. H

26. Grade 4 learners discovered that an egg sinks in fresh water. The same egg floated on salty water as shown below.



Which factor affecting floating and sinking were they investigating?

- A. Material
- B. Shape
- C. Density
- D. weight

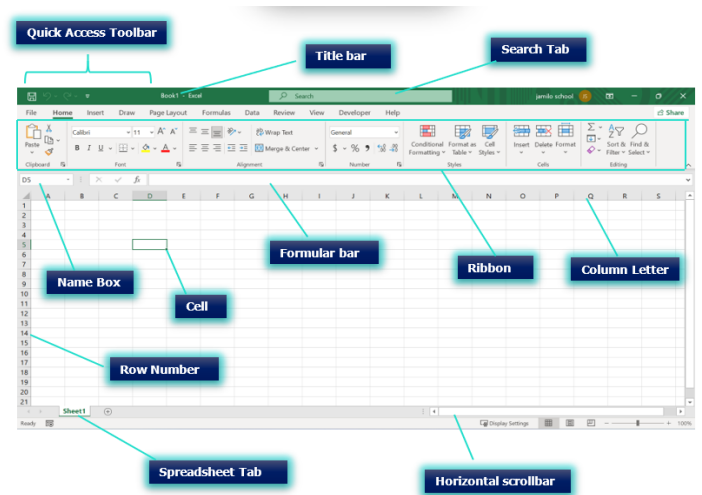
27. Grade 6 learners from a certain academy were asked to mention what they had learnt about snails and slugs. They gave their answers as shown below. Who gave the **wrong** answer?

- A. They have a wet skin and no bones.
- B. They have a pair of antennae.
- C. Those that live on land breathe through lungs.
- D. Their bodies are not segmented.

28. Which of the following statements is **true**?

- A. Blood group A can receive blood from group O and B.
- B. Blood group B can receive blood from group A and B.
- C. Blood group AB can receive blood from any of the groups.
- D. Blood group O can receive blood from group A, B and AB

29. The diagram below shows a



- A. spreadsheet
- B. power point
- C. word processor
- D. graphics software

30. Which of the following is **not** part of deciduous teeth?

- A. premolars
- B. molars
- C. canines
- D. incisors

31. Kimani observed the following phase of the moon in the sky



What is the name given to the phase of the moon?

- A. Waxing gibbous moon
- B. Waxing crescent moon
- C. Waning crescent moon
- D. Waning gibbous moon

32. Tunu put water in a basin and kept it outside in the sun. After an hour, the water was very warm. She used it for bathing. How did the heat from the sun reach the water in the basin?

- A. By radiation
- B. By convection
- C. By conduction
- D. By hydrolysis

33. Computer program that can be used to create, edit, save, retrieve and print documents is known as

- A. spreadsheets
- B. word processor
- C. data base systems
- D. graphics programs

34. Mwanaisha discovered that force can change the size of an object. Which of the following statements can be used to demonstrate what Mwanaisha discovered?

- A. A goalkeeper stopping a ball that has been shot towards the goal.
- B. A toy car that stops moving after hitting the wall.
- C. A leaner that squeezes a circular clay ball using his hands.
- D. A girl who pulls a rubber band to its full length.

35. The following are uses of the Save As command. Which one is **not**?

- A. Saving a document using a new file name.
- B. Changing the location where the document is to be saved.
- C. Saving the changes that have been made on an existing document.
- D. Saving a document with different extension

36. John was asked by his teacher to list down examples of waterborne diseases. Which one of the following is not an example he listed?

- A. Bilharzia
- B. Cholera
- C. Pneumonia
- D. Dysentery

37. The following are characteristics of a certain vertebrate.

- i. Breaths through gills.
 - ii. Body covered with scales
 - iii. Lays eggs.
- Which of the following animals has the characteristics above?

- A. Frog
- B. Fish
- C. Crocodile
- D. Toad

38. The figure below shows an internal parasite. Use it to answer questions 6-8.



The internal parasite above is called

- A. tapeworm
- B. round worm
- C. pinworm
- D. hookworm.

39. During a science lesson, learners agreed that a goat and a mango tree had many things in common. Which one of the following is **not** common between the two?

- A. Remove waste
- B. Give birth
- C. Grow
- D. Die

40. During an experiment, grade four learners heated a metallic rod at one end. Ouma was able to feel the heat at the other end. What made Ouma to feel the heat at the other end?

- A. Conduction
- B. Convection
- C. Radiation
- D. Melting

41. The following are characteristics of human teeth

- i. *sharp and pointed*
- ii. *have one root*
- iii. *used for tearing flesh*

Which type of tooth is most **likely** described above?

- A. Canine
- B. Molars
- C. Incisors
- D. Premolars

42. One of the following is not a reason for storing tools properly. Which one is it?

- A. To cause accidents.
- B. For safe keeping.
- C. For them to last longer.
- D. Tidiness in the home

43. The following are parts of male reproductive system except

- A. testis
- B. uterus
- C. urethra
- D. sperm duct

44. Three of the following are problems related to teeth except

- A. bad smell
- B. tooth cavity
- C. tooth decay
- D. dental floss

45. Which one of the following is not a function of roots?

- A. Absorbs water and mineral salts.
- B. Making food
- C. Supports the plants.
- D. Holds plant firmly in the soil.

46. Below are characteristics of different types of matter

- Definite shape.
- Definite mass
- Definite size

Which pair of materials given below has the above characteristic?

- A. Sand and rice
- B. Kerosene and salt
- C. Paper and porridge.
- D. Oxygen and water

47. Which of the following planets would require the most amount of clay to model?

- A. Mercury
- B. Neptune
- C. Earth
- D. Jupiter

48. Which of the following parts of the digestive system stores undigested food for a short while?

- A. Colon
- B. ileum
- C. Rectum
- D. Stomach

49. What is the function of a C.P.U as part of computer?

- A. It processes information put in a computer
- B. Converts information from a computer into paper
- C. Used to key in information from the monitor
- D. Takes image from m-books, magazines pages and poster

50. All the following are diseases that affect the breathing system **except**

- A) Pneumonia
- B) Asthma
- C) T.B
- D) Dysentery