



# MENTOR ASSESSMENT EXAM - 2020

## CLASS 8

## SCIENCE

Time: 1 hour 40 minutes

### INSTRUCTIONS TO CANDIDATES (Please read these instructions carefully)

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

#### **HOW TO USE THE ANSWER SHEET**

3. Use only an ordinary pencil.
4. Make sure you have written on the answer sheet:
  - YOUR INDEX NUMBER**
  - YOUR NAME**
  - NAME OF YOUR SCHOOL**
5. By drawing a **dark line** inside the correct numbered boxes mark your full index number (i.e. School Code Number and the three-figure Candidate's Number) in the grid near the top of the answer sheet.
6. Do not make any marks outside the boxes.
7. Keep your answer sheet as clean as possible and **DO NOT FOLD IT**.
8. For each of the Questions 1 – 50 four answers are given. The answers are lettered A, B, C, D. In each case only **ONE** of the four answers is correct. Choose the correct answer.
9. On the answer sheet the correct answer is to be shown by drawing a dark line inside the box in which the letter you have chosen is written.

#### **Example**

20. Plants require all the following to make their own food except

- A. Water
- B. Sunlight
- C. Oxygen
- D. Carbon dioxide

The correct answer is C.

On the answer sheet:

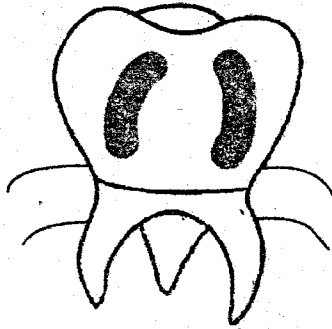
1. [A] [B] [C] [D] 10. [A] [B] [C] [D] 20. [A] [B] [C] [D] 30. [A] [B] [C] [D] 40. [A] [B] [C] [D]

In the third set, the box with the letter C printed in it is marked.

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

*This Question Paper consists of 8 printed pages.*

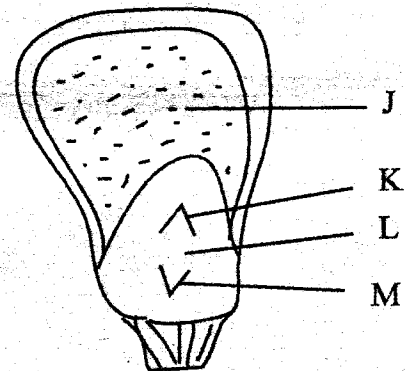
1. The diagram below shows a tooth defect.



Which of the following cannot help prevent the defect?

- A. Brush teeth irregularly.  
 B. Avoid sugary food.  
 C. Take foods rich in calcium and phosphorus.  
 D. Use teeth for the right purpose.
2. Which of the following animal feeds is stored in silos?  
 A. Pasture  
 B. Fodder  
 C. Hay  
 D. Silage
3. Which two parts of the breathing system have hair and mucus?  
 A. Air Sacs, nose.  
 B. Nose, Trachea.  
 C. Nose, bronchus.  
 D. Nose, lungs.
4. Objects either in motion or stationary remain at the same state unless a force is applied. This is due to \_\_\_\_\_ principle.  
 A. Weight.  
 B. Inertia.  
 C. Friction.  
 D. Density.

5. Which of the following crops is a stem tuber?  
 A. Carrot.  
 B. Sweet potato.  
 C. Irish potato.  
 D. Cassava.
6. Standard eight pupils mixed soap and hard water. Which of the following substances did they observe?  
 A. Fur.  
 B. Scum.  
 C. Lather.  
 D. Scale.
7. Which of the following consists of materials that can be attracted by a magnet ONLY?  
 A. Nickel, copper, cobalt.  
 B. Copper, chromium, silver.  
 C. Iron, steel, cobalt.  
 D. Chromium, tin, aluminium.
8. The diagram below shows the internal parts of a maize grain.



Which letter represents the part that stores food?

- A. J.  
 B. K.  
 C. L.  
 D. M.

9. Standard five pupils grouped small animals as shown below.

Group A – beetle, spider, tick.

Group B – aphid, weevil, moth.

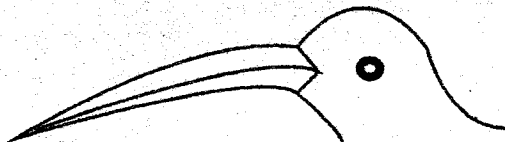
Group C – ladybird, mite, ant.

Group D – spider, moth, tick.

Which group grouped the small animals correctly?

- A. Group A.  
B. Group B.  
C. Group C.  
D. Group D.
10. Which of the following methods of grazing can one practice in areas that have high population?
- A. Paddockging.  
B. Stall feeding.  
C. Strip grazing.  
D. Herding.

11. Standard eight pupils observed the bird shown below



The bird shown above is likely to be found in a \_\_\_\_\_.

- A. Flower bed.  
B. River.  
C. Swamp.  
D. Forest.
12. Which one of the following is not a reason as to why tools should be maintained?
- A. To avoid accidents.  
B. To make them more efficient.  
C. To make them more durable.  
D. To make them more beautiful.

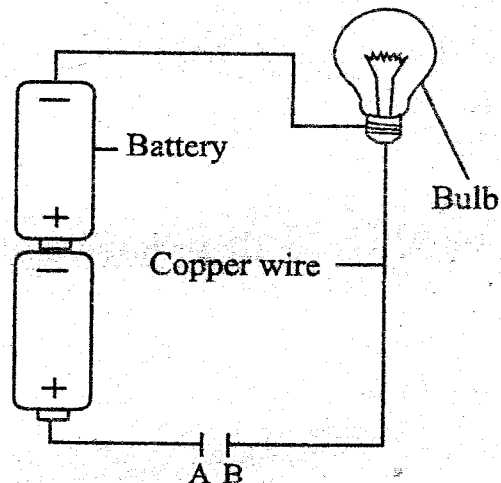
13. Which of the following vaccines is administered orally?

A. B.C.G.  
B. Antipolio.  
C. Antimeasles.  
D. D.P.T.

14. When exhaling, the

A. Lungs get deflated.  
B. Ribs move upwards.  
C. Diaphragm flattens.  
D. Pressure in the chest decreases.

15. Standard seven pupils in Nawiri Junior School were investigating a certain aspect in electricity.



Which of the following materials will not make the bulb light if put between A and B?

- A. Silver coin, copper coin, aluminium foil  
B. Plastic ruler, wax, piece of glass  
C. Razor blade, iron needle, ten shilling coin  
D. Aluminium, brass, nickel
16. Which one of the following is not needed in an experiment to investigate drainage in different soils?
- A. Identical funnels.  
B. Different soils.  
C. Identical tubes.  
D. Collecting jars.

17. The following are different ways of conserving the soil. Which one mainly conserves soil moisture?
- Terracing.
  - Crop rotation.
  - Cover cropping.
  - Mulching.
18. Which of the following components of air make up a fifth of air by volume?
- Oxygen.
  - Rare gases.
  - Carbondioxide.
  - Nitrogen.
19. Which one of the following is not a feature of plants that grow in dry areas?
- They have deep root to look for water.
  - They have thin waxy cuticles on their leaves.
  - They have needle like leaves.
  - They have fleshy stems for storing water.
20. The diagram below shows the change of states of matter.
- 
- Which arrows represent condensation and melting respectively?
- (iii) and (ii).
  - (i) and (iii).
  - (iv) and (i).
  - (i) and (ii).
21. The following are physical changes that occur in boys during adolescence stage. Which one does not?
- Growth of pubic hair.
  - Having wet dreams.
  - Enlargement of hips.
  - Breaking of the voice.
22. Which one of the following shows the fourth and eighth planets in the solar system respectively?
- Neptune and Mars.
  - Earth and Uranus.
  - Mars and Saturn.
  - Mars and Neptune.
23. Which of the following is not obtained from organic matter?
- Compost manure.
  - Sulphate of ammonia.
  - Farm yard manure.
  - Green manure.
24. Standard four pupils saw dark grey clouds in the sky. What weather did they experience?
- Strong wind.
  - Calm weather.
  - Heavy rainfall.
  - Low temperature.
25. Which one of the following shows foods that will help in preventing kwashiorkor?
- Maize, beans and spinach.
  - Cabbage, eggs and rice.
  - Bread, cowpeas and greengrams.
  - Fish stew, boiled eggs and beans.

26. Which statement below is NOT TRUE about clay soil?

- A. Clay soil has a high drainage.
- B. Clay soil cracks when dry.
- C. Clay soil has a smooth texture.
- D. Clay soil has little air spaces.

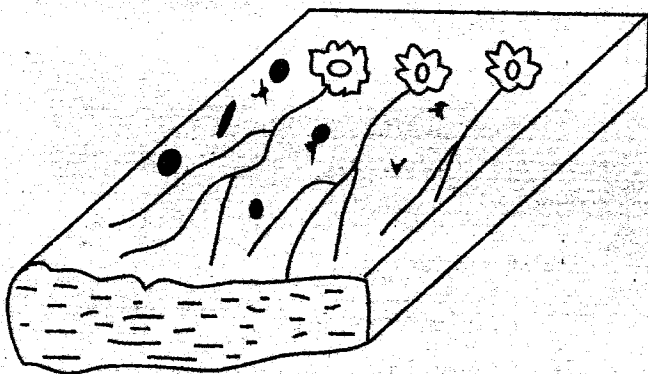
27. Which one of the following stores bile juice?

- A. Liver.
- B. Ileum.
- C. Gall bladder.
- D. Duodenum.

28. Which one of the following methods of food preservation preserves food by dehydrating bacteria and fungi?

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

29. The diagram below shows a type of soil erosion standard six pupils observed



The type of soil erosion above is known as?

- A. Gully.
- B. Sheet.
- C. Rill.
- D. Splash.

30. Which of the following diseases can be controlled by draining stagnant water?

- A. Typhoid and bilharzia.
- B. Malaria and bilharzia.
- C. Bilharzia and cholera.
- D. Cholera and typhoid.

31. Which statement below is NOT CORRECT about a flower that is pollinated by a bee?

- A. The flower has nectar.
- B. The flower has brightly coloured petals.
- C. The flower produces light pollen grain.
- D. The flower has large flower parts.

32. The following are effects of HIV/AIDS.

- i. *Lowers economic growth.*
- ii. *Lowers self esteem.*
- iii. *Leads to lack of parental care.*
- iv. *Makes one emotionally weak.*

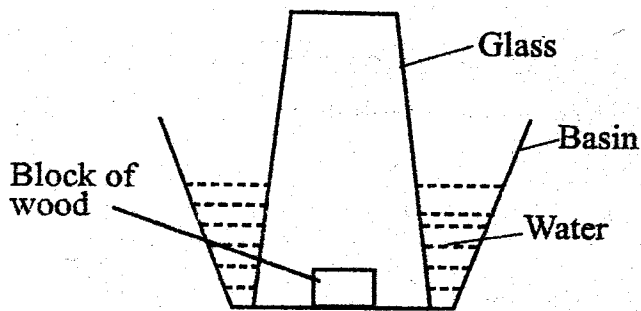
Which of the above HIV/AIDS effects are individual effects?

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

33. In the female reproductive system, implantation occurs in the?

- A. Uterus.
- B. Oviduct.
- C. Vagina.
- D. Ovary.

34. The diagram below represents an experiment standard 5 pupils carried out during their science lesson.



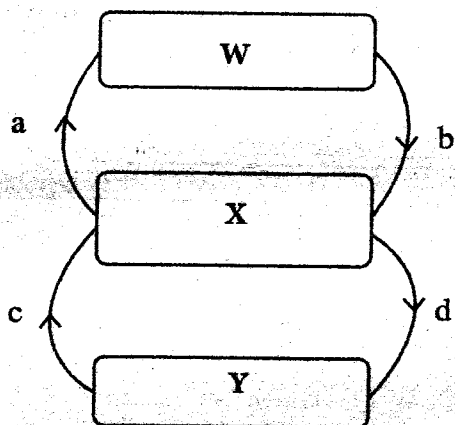
The experiment is used to demonstrate that?

- A. Matter has volume.  
 B. Matter has weight.  
 C. Matter occupies space.  
 D. Matter has mass.
35. Which one of the following is not important to consider when taking medicine?  
 A. The dose.  
 B. The expiry date.  
 C. Date of manufacture.  
 D. Prescription.
36. During lightning all the following should be done except?  
 A. Avoid pools of water.  
 B. Stay indoors.  
 C. Carry sharp pointed objects.  
 D. Wear shoes with rubber soles.
37. Which of these sexually transmitted infections is wrongly matched with its causative organism?
- | STI           | Causative Organism |
|---------------|--------------------|
| A. Gonorrhoea | Bacterium          |
| B. Syphilis   | Bacterium          |
| C. Chancroid  | Virus              |
| D. HIV/AIDS   | Virus              |
38. Which one of the following consists of a list of storage pests ONLY?  
 A. Rodents, weevils, cutworms.  
 B. Rats, weevils, white ants.  
 C. Aphids, cutworms, weevils.  
 D. Weevils, rats, aphids.
39. The following animals feed on vegetation only. Which one does not?  
 A. Warthog.  
 B. Pig.  
 C. Zebra.  
 D. Rabbits.
40. The following are ways of controlling a certain communicable disease.  
 i. *Avoiding dusty places*  
 ii. *Getting BCG vaccine*  
 iii. *Drinking boiled milk*  
 iv. *Staying in well ventilated rooms*  
 Which of the following diseases is prevented by the ways described above?  
 A. Malaria.  
 B. Cholera.  
 C. Tuberculosis.  
 D. Bilharzia.
41. Which one of the following is the second stage of HIV infection?  
 A. Asymptomatic stage.  
 B. Window stage.  
 C. Full blown stage.  
 D. Symptomatic stage.
42. Which of the following is a health effect of drug abuse?  
 A. Rape.  
 B. Marital conflict.  
 C. Accident.  
 D. Withdrawal symptoms.

43. Which of the following forms of energy require no medium to travel?
- Sound and electricity.
  - Heat and sound.
  - Light and electricity.
  - Heat and light.

44. Using water sparingly involves all the following EXCEPT?
- water used for washing clothes being used to clean the house.
  - Using a little water as possible for washing utensils.
  - Bathing with just enough water.
  - Using drip irrigation instead of overhead irrigation.

45. The diagram below shows how blood flows in the body.



Which one of the following correctly represents a, b, c and d respectively?

- Pulmonary vein, pulmonary artery, aorta, vena cava.
- Pulmonary artery, pulmonary vein, vena cava, aorta.
- Vena cava, pulmonary artery, pulmonary vein, aorta.
- Aorta, pulmonary vein, vena cava, pulmonary artery.

46. Sound energy travels poorest in one of the following, which one is it?

- Clay.
- Oxygen.
- Copper.
- Water.

47. Which one of the following methods of controlling crop pests is time consuming?

- Scaring.
- Spraying.
- Handpicking.
- Weeding.

48. The following are units for measuring the quantity of matter in a substance EXCEPT?

- Kilograms.
- Tonnes.
- Newtons.
- Grams.

49. Which one of the following cannot be recycled?

- Petrol.
- Waste paper.
- Plastic bags.
- Scrap metals.

50. Which one of the following activities will NOT increase the rate at which salt disappears in a cup of water?

- Increasing amount of water.
- Crushing the salt.
- Increasing temperature of water.
- Adding more salt.