ACHIEVERS FOCUS EXAMINATION SERIES



STANDARD 8 – 2021 SCIENCE

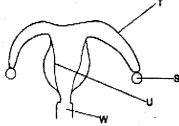
AF005

Time: 1 hour 40 minutes

- 1. Which type of teeth is one **NOT** likely to be used when eating sugarcane?
 - A. Incisors
 - B. Molars
 - C. Premolars
 - D. Canines
- 2. When rays of light pass from air to water they
 - A. Bounce back
 - B. Increase in size
 - C. Are bent
 - D. Are absorbed
- 3. The following are signs and symptoms of a certain disease.
 - (i) Fever
 - (ii) Sever haedache
 - (iii) Blood in stool and urine
 - (iv) Sever dehydration
 - (v) Vomiting

Which two are for typhoid?

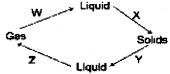
- A. (i) and (ii)
- B. (iii) and (iv)
- C. (ii) and (iii)
- D. (iv) and (v)
- **4.** Which one of the following foods is rich in both proteins and fats?
 - A. Avocado B. Milk C. Sunflower D. Beans
- 5. Which one of the following is **NOT TRUE** about pressure exerted by liquids? Pressure in liquids increases when the
 - A. Diameter of container is reduced
 - B. Container with liquid is raised
 - C. Amount of liquid is increased
 - D, Depth of liquid is increased
- **6.** The diagram below represents a female reproductive system.



The process taking place in the parts labeled S, T, U and W respectively are

- A. Ovary, oviduct, uterus, vagina
- B. Fertilization, ovulation, parturition, implantation
- C. Ovulation, fertilization, implantation, parturition
- D. Parturition, implantation, ovulation fertilization

- 7. Which one of the following is a source of mechanical energy?
 - A. Dam
 - B. Solar panel
 - C. Wind turbine
 - D. Biogas plant
- 8. The diagram below shows process W, X, Y and Z.



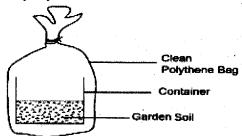
Which process requires losing heat from the environment?

- A. X and Y
- B. W and X
- C. Z and X
- D. Y and Z
- 9. Below is a food chain in a given grassland.

Sweet potatoes → locust → newt → snakes → secretory birds

What would likely happen immediately after all the snakes were killed?

- A. Locust would decrease in number
- B. Secretory birds would die
- C. Newt would decrease in number
- D. The number of sweet potatoes would increase
- **10.** The diagram below shows a set-up that was used by a standard 4 pupil to investigate a certain component of soil. The set up was kept out for some time on a hot sunny day.



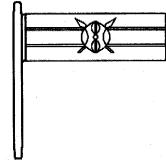
What component of soil were the pupils investigating?

- A. Living organism
- B. Moisture

C. Air

- D. Humus
- 11. The best method of handling medicine bottles after use is
 - A. Re-using them
 - B. Burning them
 - C. Recycling
 - D. Burying them in deep soil
- **12.** Which one of the following animals does **NOT** have strong hind legs?
 - A. Grasshopper B. Lizards C. Toads D. Frogs

- **13.** Which one of the following is the initial type of energy in a radio that uses dry cell to operate?
 - A. Electrical
 - B. Magnetic
 - C. Heat
 - D. Chemicals
- **14.** A burning sensation when urinating and pain in the lower abdomen can be a sign of
 - A. Gonorrhea
 - B. HIV and AIDS
 - C. Chancroid
 - D. Syphilis
- 15. The diagram below represents a simple machine.



Which of the following statements about the simple machine is true? The machine

- A. Changes the direction of force
- B. Reduces the work done
- C. Increase the effort distance
- D. Functions the same as ladder
- **16.** The following are examples of renewable energy except
 - A. Diesel
 - B. Sun
 - C. Wind
 - D. Biogas
- 17. Mothers should breast feed their babies always MAINLY because breast milk
 - A. Helps in bonding
 - B. Is readily available
 - C. Boosts immunity of the body
 - D. Is used for weaning
- 18. The following are characteristics of clouds.
 - (i) Look like bundles of cotton wool
 - (ii) Show fine weather
 - (iii) Have a flat base

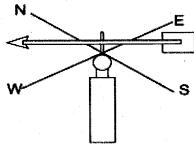
The described clouds are

- A. Cumulus
- B. Nimbus
- C. Stratus
- D. Cirrus

- 19. Which one of the following shows the **CORRECT** urine passage from the kidney during excretion?
 - A. Ureter bladder urethra
 - B. Urethra bladder ureter
 - C. Bladder ureter urethra
 - D. Bladder urethra ureter
- 20. During birth, the following procedure takes place.
 - (i) The baby comes out through the vagina
 - (ii) Uterine wall contracts causing labor pain
 - (iii) Amnion sac is broken and amniotic fluid is released
 - (iv) Umbilical cord is tied and then cut

Which of the following is the CORRECT order?

- A. (ii), (iii) (i) (iv)
- B. (ii) (iii) (iv) (i)
- C. (iii) (ii) (i) (iv)
- D. (iii) (ii) (iv) (i)
- 21. The illustration below is a wind vane made from locally available materials.



Which one of the following statements about the instrument is **INCORRECT?**

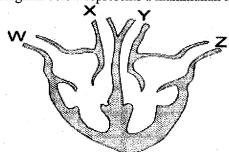
- A. It measures the direction of the wind
- B. Its arrowhead points to the direction where the wind is going
- C. The arrowhead should be smaller than the tail
- D. It should be placed far away from buildings and trees
- 22. The most effective way of controlling HIV/AIDS among married couples is by
 - A. Abstinence
 - B. Using condoms
 - C. Having one partner
 - D. Being faithful
- 23. Plants that grow on nitrogen deficiency soil are called
 - A. Insectivorous
 - B. Leguminous
 - C. Parasitic
 - D. Saprophytes
- 24. Which one of the following lists consist of major components of the environment?
 - A. Air, sound, light
 - B. Soil, water, animals
 - C. Fern, wind, furniture
 - D. Mushroom, light, water

- **25.** Class 6 pupils collected seeds, cooking oil, boiled water and a container. Which condition necessary for germination were they likely to investigate?
 - A. Oxygen
 - B. Warmth
 - C. Moisture
 - D. Soil
- **26.** Which one of the following is a way of conserving energy by using an efficient device?
 - A. Using a jiko with a clay lining
 - B. Switching off bulbs when not in use
 - C. Using charcoal to cook food
 - D. Using non-renewable sources
- 27. The following are parts of the alimentary canal
 - (i) Mouth
 - (ii) Small intestine
 - (iii) Stomach
 - (iv) Gullet
 - (v) Large intestine

In which two parts does absorption take place?

- A. (ii) and (v)
- B. (iv) and (iii)
- C. (ii) and (iv)
- D. (i) and (v)
- **28.** Which one of the following parts of the insectivorous plants is adapted for trapping insects?
 - A. Flowers
 - B. Leaf
 - C. Stem
 - D. Fruit
- 29. Which one of the following is a source of oil?
 - A. Avocado
 - B. Green grams
 - C. Milk
 - D. Groundnuts
- **30.** The following are ways through which plants show interdependence **EXCEPT**
 - A. Sharing food
 - B. Support
 - C. Provision of shelter
 - D. Provision of medicine
- 31. A hawk and a duck billed platypus
 - A. Have their bodies covered with hair
 - B. Reproduce by laying eggs
 - C. Have mammary glands
 - D. Have a varying body temperature

- **32.** Which of the following **CANNOT** be measured in newtons?
 - A. Weight
 - B. Friction
 - C. Gravity
 - D. Pressure
- **33.** Which one of the following is not a disadvantage of chemical fertilizers? They
 - A. Encourage growth of weeds
 - B. Pollute soil when used excessively
 - C. Are expensive
 - D. Are corrosive to plants
- **34.** When modeling the solar system, the orbit can be made using
 - A. Pins
 - B. Soft wire
 - C. Barbed wire
 - D. Paper machine
- **35.** Which of the following components of the environment is found in all other components?
 - A. Air
 - B. Soli
 - C. Water
 - D. Animals
- 36. The diagram below represents a mammalian heart.



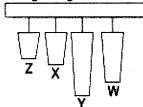
In which pair of blood vessel is blood under highest pressure?

- A. W and X
- B. X and Y
- C. Y and Z
- D. W and Z
- 37. The rate at which water drains in the soil is mainly determined by the
 - A. Volume of the soil
 - B. Size of the soil particles
 - C. Humus content in the soil
 - D. Air content in the soil
- 38. Bilharzia and malaria diseases can both be prevented by
 - A. Wearing protective clothing
 - B. Clearing bushes
 - C. Pouring oil on stagnant water
 - D. Draining stagnant water

- **39.** An adult human being has how many molars on each side of the jaw?
 - A. 6
- B. 3
- C. 4
- D. 2
- **40.** The following are signs and symptoms of a waterborne disease.
 - (i) Constipation (ii) Severe headache (iii) Skin rash
 - (ii) Body temperature rises beyond normal

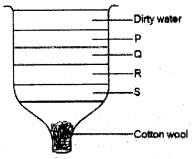
The disease described above is likely to be

- A. Bilharzia
- C. Cholera
- B. Malaria
- D. Typhoid
- 41. Four bars of different length but of the same thickness were suspended using strings as shown below.

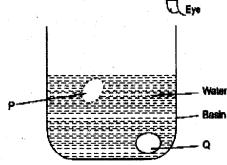


When struck with a metal rod, which bar will produce the loudest sound?

- A. W
- B. Y
- C. X
- D. Z
- **42.** Which of the following foods provide a diet of proteins and carbohydrates?
 - A. Clovers and lucerne
 - B. Sunflower seeds and barley grains
 - C. Sunflower and maize grains
 - D. Lucerne and maize grains
- 43. Standard 5 pupils planted seeds in a container. After germination, they added water that covered the seedlings. They then placed the container outside the classroom. They noted that the seedlings died after a few days. The main reason why the seedlings died was due to
 - A. Too much light
- C. Lack of air
- B. Lack of warmth
- D. Lack of mineral salts
- **44.** Which one of the following statements would be true about a young insect pollinated flower whose style has been cut off?
 - A. Pollen grains will not develop
 - B. Pollination will occur
 - C. Ovules will not develop into seeds
 - D. Anthers will not produce pollen grains
- **45.** In the diagram below P, Q, R and S represent different layers of materials in a water filter.



- Which material are represented by P, Q, R and S respectively?
- A. Charcoal, fine sand, coarse sand, pebbles
- B. Fine sand, charcoal, pebbles, coarse sand
- C. Pebbles, coarse sand, fine sand, charcoal
- D. Coarse sand, charcoal, pebbles, fine sand
- **46.** The diagram below represents a set up used to demonstrate a certain property of light.



Which one of the following statements is correct about the set up? Light is

- A. Reflected from P to the eye
- B. Refracted from Q to the eye
- C. Reflected from Q to the eye
- D. Refracted from P to the eye
- 47. 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
- **48.** Which 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 crow bar
- **49.** A plane mirror is placed at the beginning of the word MALARIA. Which one of the following groups of letters will remain the same when the word is reflected?
 - A. M, A, L
- B. M, A, I
- C. R. A. I
- D. L, I, A
- **50.** Which of the following pairs of food is preserved by smoking, salting and drying?
 - A. Meat and mushroom
 - B. Beans and fish
 - C. Mushroom and beans
 - D. Meat and fish