



# FRONTRUNNER EXAM

## STANDARD SEVEN 2021

### SCIENCE

7

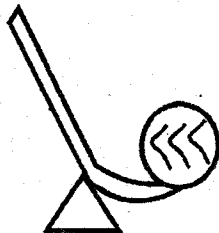
Time: 1 hour 40 mins

**READ THIS INSTRUCTIONS CAREFULLY**

1. Make sure that you have written on the answer sheet.

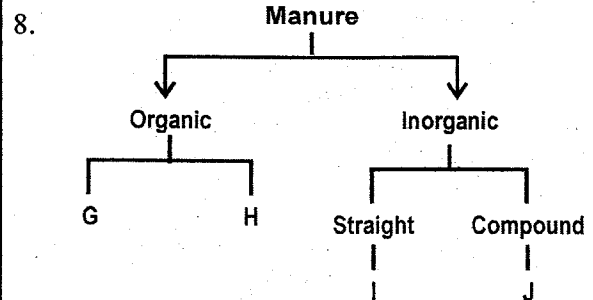
i) Your Name \_\_\_\_\_ ii) Name of your school \_\_\_\_\_

- Which one of the following simple tools can only be maintained by cleaning  
 A. Axe  
 B. Knife  
 C. Jembe  
 D. Bottle opener
- Which one of the following is **NOT** a force  
 A. Weight  
 B. Gravity  
 C. Friction  
 D. Inertia
- Which one of the following is **NOT** caused by force?  
 A. Make objects to change state  
 B. Make objects change their shape  
 C. Stops objects from moving  
 D. Makes objects change direction
- Which one of the following is in the same class of levers as the one drawn below?



- Nut cracker
- Wheelbarrow
- Pliers
- Spade

- Which one of the following teeth problems is associated with plague?  
 A. Decay  
 B. Bad smell  
 C. Gingivitis  
 D. Cavities
- Which one of the following features of sandy soil **DOES NOT** explain why water drains through it easily?  
 A. Presence of large particles  
 B. Presence of shiny particles  
 C. Presence of rough texture  
 D. Presence of large air spaces
- Which one of the following statements explains how trees conserve soil?  
 A. Trees stop the flow of surface water  
 B. Their leaves reduce the heat reaching the ground  
 C. Their leaves reduce the rate of evaporation of water from the ground  
 D. Their roots hold soil particles

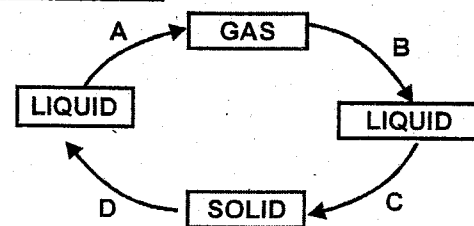


The chart above shows a simple classification of manures. Which manure is represented by G, H, I and J

G	H	I	J
A. Green Manure	Compost	Phosphatic	Nitrogenous
B. Compost	Farmyard	Potassic	NPK
C. Mulch	Nitrogenous	NPK	Potassic
D. Farmyard Manure	Green	Nitrogenous	Potassic

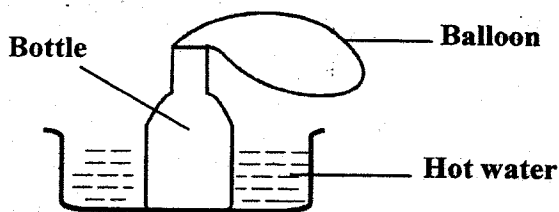
- Which one of the following statements is **NOT CORRECT**?  
 A. All birds kept at home are called poultry  
 B. Big animals give us hides  
 C. Small animals like goats give us skins  
 D. All animals make their own food
- Which one of the following groups of animals consists of invertebrates in the same group as a scorpion?  
 A. Ticks, Spiders, Mites  
 B. Snails, Slugs, oysters  
 C. Crabs, Prawns, Lobsters  
 D. Centipedes, Millipedes

Study the diagram below and use it to answer question 11 and 12



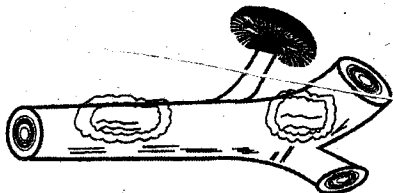
- Which two process require an increase in temperature to occur  
 A. D and A  
 B. C and D  
 C. B and C  
 D. A and B

12. The process marked C is  
 A. Solidification      B. Evaporation  
 C. Melting              D. Condensation
13. Standard five pupils of Nowa Primary School set up an experiment as shown below



What was their conclusion after sometime?

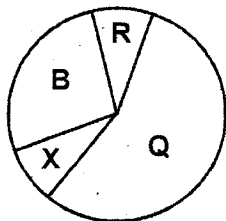
- A. The balloon got inflated  
 B. The balloon was blown away  
 C. Drop of water formed in the bottle  
 D. Air expands when heated
14. The diagram below shows a certain type of plant



The plant above can be classified as

- A. A mushroom              B. A bacteria  
 C. A saprophyte              D. A parasitic plant
15. Which one of the following features will **NOT** promote cross pollination in flowers?  
 A. Stigma and anthers of a flower maturing at the same time  
 B. Stigma covered inside the petals  
 C. Stigma and anthers of a flower maturing at different times  
 D. Stigma raised higher than the anthers
16. Which one of the following **CORRECTLY** matched with what it uses to climb on other plants  
 A. Passion fruit - Thorns  
 B. Peas - Tendrils  
 C. Climbing fig - Tendrils  
 D. Pumpkin - Climbing roots

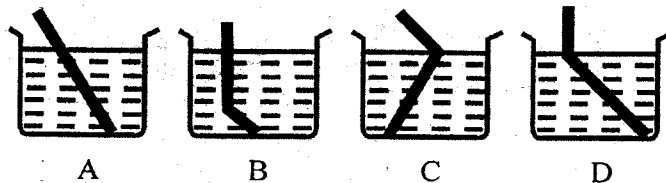
17. The pie chart below shows composition of air



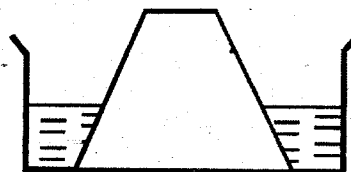
Which sector shows the gas given out during photosynthesis?

- A. X      B. Q      C. R      D. B

18. A standard six pupil put a ruler in a glass of water. Which of the following shows how the ruler appeared?



19. Wewe inverted a glass over water as shown below. Water did not enter the glass



To make water enter the glass Wewe should

- A. Make a hole at the bottom of the basin  
 B. Put a dry paper at the bottom of the glass  
 C. Add water in the basin  
 D. Make a hole at the bottom of the glass
20. Which one of the following statements is **NOT TRUE** about the human circulatory system?  
 A. Plasma transports waste products to the excretory organs  
 B. All arteries carry blood rich in oxygen except one  
 C. The pulmonary vein carries oxygenated blood  
 D. The pulmonary artery carries blood to the digestive organs
21. The **MAIN** reason why it is advisable to use the nostril rather than the mouth in breathing is  
 A. Air through the mouth does not reach the lungs  
 B. Nose inhales more air than the mouth  
 C. Nostril warm the inhaled air before reaching the lungs  
 D. Nostril contains hair and mucus that trap dust and germs

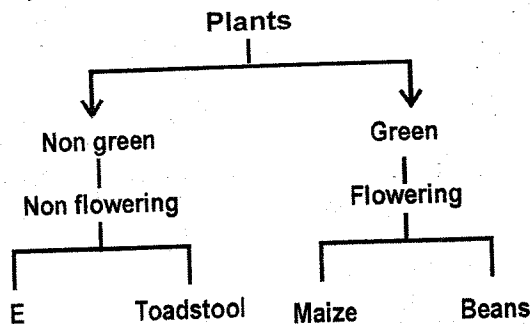
22. Which one of the following body structures in the table below is **NOT CORRECTLY** matched to its function

Structure	Function
A. Mouth	Food broken into small particles
B. Villi	Absorb digested food
C. Large intestines	Storing digested food
D. Pancrease	Produce a digestive juice

23. Which one of the following plants is **CORRECTLY** matched with its storage organ?

Plant	Storage
A. Carrot	Leaves
B. Onion	Stem
C. Cassava	Roots
D. Irish	Roots

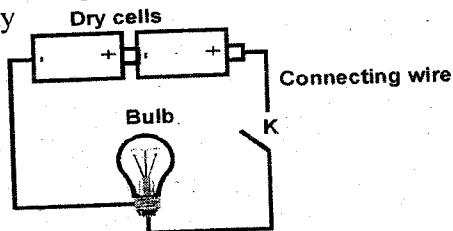
24. Study the classification of plants in the chart below



Choose the **CORRECT** pair that could be represented by **D** and **E** respectively

D	E
A. Dicotyledonous	Pine
B. Flowering	Puffball
C. Monocotyledonous	Lichens
D. Dicotyledonous	Fern

25. The diagram below represents a set up that can be used to investigate good and bad conductors of electricity



Which one of the following materials when used to connect wires at position **K** would make the bulb light?

- A. Glass rod
- B. Wet thread
- C. Rubber
- D. Plastic ruler

26. A ruler placed slanting and partially immersed in water appears bent because light

- A. From that part of the ruler under water is reflected
- B. From that part of the ruler under water is refracted
- C. From that part of the ruler under water is dispersed
- D. Travels in a straight line in the same medium

27. Which one of the following is a reason why infants are immunized?

- A. To enable the child grow faster
- B. To prevent the child from contracting some diseases
- C. To make their teeth and bones strong
- D. To treat diseases which a child may inherit from the mother

28. An HIV patient had the following signs

- (i) Looked normal and healthy
- (ii) Tested negative
- (iii) Could infect others

The patient was undergoing a stage called

- A. Full blown AIDS
- B. Window period
- C. Incubation stage
- D. Symptomatic stage

29. The Kenyan Government through the Ministry of Health has banned some drugs. The **MAIN** reason why such drugs are banned is because?

- A. They are narcotic and as such detrimental to health
- B. They take up land which would otherwise be for agriculture
- C. People waste a lot of money buying them
- D. They hinder development of oneself economically, socially and spiritually

30. Which one of the following is **TRUE** about heat transfer by convection? It takes place in \_\_\_\_\_

- A. Solids only
- B. Liquids and gases
- C. Gases only
- D. Solids and gases

31. Which one of the following are both reasons for lighting a house?

- A. Safety and drying
- B. Seeing clearly and warming
- C. Drying and warming
- D. Safety and discouraging pests

32. Which one of the following pairs is a source of electricity?

- A. Dam and a dynamo
- B. Wind-driven turbine and a dam
- C. Torch and a dynamo
- D. Dry cell and a geothermal generator

33. Formation of a rainbow can be demonstrated by the following activities **EXCEPT** when

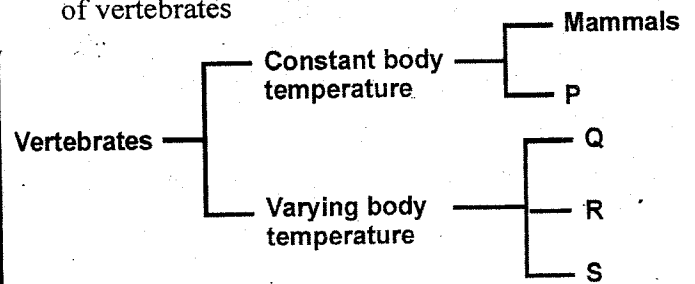
- A. Placing a biro pen casing on water in a glass container
- B. Observing the sun through a horizontally held transparent biro pen casing
- C. Placing a mirror in water to face the sun
- D. Spraying water in the air from the mouth in bright sunshine

34. Three of the following **CORRECTLY** describe how silage is prepared. Which one is wrong?

- A. It is put in a silage pit and air-tightly covered to ferment
- B. It is conserved in its succulent state
- C. It is put in silos and compressed to remove air
- D. It is partially dried in the sun before its packed

35. Which one of the following is **NOT** a sign of parasites on a livestock?  
 A. Poor health  
 B. Itching and irritation  
 C. Anaemia  
 D. Mounting other animals
36. Which one of the statements is **UNTRUE** ?  
 A. Chicken, weaver birds, pigeons and doves all eat grains  
 B. Leopard, mongoose, dogs and cats are carnivores  
 C. Ostriches, kiwis and penguins can fly  
 D. Grasshoppers, kangaroos, locusts and frogs can leap and hop
37. Which of the following waterborne diseases **CANNOT** be prevented by eating properly cooked food and washing hands before eating?  
 A. Cholera  
 B. Bilharzia  
 C. Typhoid  
 D. Dysentery
38. The table below shows weather instruments and the principle behind their working. Which one of them is **NOT** matched correctly
- | Instrument     | Principle used            |
|----------------|---------------------------|
| A. Windsock    | Air exerts pressure       |
| B. Windvane    | Air in motion             |
| C. Thermometer | Expansion and contraction |
| D. Rain gauge  | Liquids occupy space      |
39. The planet that is the 3rd smallest \_\_\_\_\_  
 A. Is also known as the purple planet  
 B. Is the 2nd from the sun  
 C. Is the 5th furthest planet from sun  
 D. It lies between Jupiter and Uranus
40. The following are methods of preserving food  
 (i) Smoking (ii) Freezing  
 (iii) Drying (iv) Salting  
 (v) Canning  
 Which methods are traditional  
 A. i, iv, v  
 B. i, ii, v  
 C. i, iii, iv  
 D. i, ii, iv
41. A child with thin brownish hair, swollen hands, feet and face is also **LIKELY** to  
 A. Have faster heart beat  
 B. Appear weak and inactive  
 C. Have a face like an old person  
 D. Have knock knees

42. The chart below shows a simple classification of vertebrates



Which one of the following groups of vertebrates does **P** represent?  
 A. Reptiles B. Amphibians C. Birds D. Fish

43. Which one of the following practices **DOES NOT** pollute the environment?  
 A. Dumping factory wastes into a river that flows into the lake  
 B. Dumping vegetable remains in a farm in the homes  
 C. Spilling used oil in a forest away from homes  
 D. Spraying some oil in a pond to kill mosquito larvae
44. The **BEST** way to allow sunlight in a house is to use  
 A. Electricity  
 B. Large windows  
 C. Sky light  
 D. A chimney
45. The surfaces of roads are tarmacked to  
 A. Make vehicles skid B. Make roads attractive  
 C. Reduce friction D. Increase friction
46. Large amounts of mass is measured in  
 A. Newtons B. Joules C. Grams D. Tonnes
47. Three of the following are ways of conserving water, Which one is **NOT**  
 A. Repairing leaking taps  
 B. Using the sprinkle method of irrigation  
 C. Digging trenches and dams to trap off water  
 D. Planting nappier grass along river banks
48. Which one of the following **LEAST** pollutes the environment  
 A. Gases from factories  
 B. Exhaust gases from vehicles  
 C. Smoke from burning charcoal  
 D. Rotting plant and animal matter
49. The following are effects of water pollution in the soil **EXCEPT**?  
 A. Reduce air supply  
 B. Make it impossible for birds to fly  
 C. Make the soil less fertile  
 D. Can kill living organisms in the soil
50. Which one of the following foods can be both an energy-giving and a protective food?  
 A. Beans B. Bananas C. Irish potatoes D. Kales