

Practice Questions and Answers

BASIC SCIENCE

FOR

Junior Secondary School

3



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Basic Science Exam Questions and Answers Pack

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QUESTIONS

TOPIC: ACIDS, BASES AND SALTS

DIRECTION: Choose the correct answer from the lettered options.

1. Which one of the following is not true about acids?

- A. Acids have sweet taste.
- B. Acids have sour taste.
- C. Acids could be corrosive.
- D. Acids turn blue litmus red.

2. Acidic substances turn blue litmus paper _____.

- A. purple
- B. green
- C. red
- D. yellow

3. Basic substances turn red litmus paper _____.

- A. purple
- B. green
- C. blue
- D. yellow

4. Bases which are readily soluble in water are called _____.

- A. basics
- B. acidic
- C. alkaline
- D. elements

5. Bases have _____ pH values.

- A. high
- B. low
- C. positive
- D. neutral

6. _____ is any hydroxide that dissolves in water to yield hydroxide ion (OH^-) as the only negative charge.

- A. Acid
- B. Base
- C. Sugar
- D. Salt

7. When an acid can form two series of salts, the acid is termed _____.

- A. very strong
- B. dibasic
- C. an acid salt
- D. quite dilute

8. Acids have _____ pH values.

- A. high
- B. low
- C. negative
- D. neutral

9. The pH value of a neutral solution is _____.

- A. 5
- B. 6
- C. 7
- D. 8

10. _____ is a substance that produces hydrogen ion (H^+) as the only positive ion when mixed with water.

- A. Base
- B. Salt
- C. Sugar
- D. Acid

11. Litmus paper is referred to as _____.

- A. an activator
- B. a motivator
- C. an indicator
- D. a pointer

12. An alkali will turn red litmus _____.

- A. white
- B. claret
- C. blue
- D. crimson

13. Which of the following has a pH less than 7?

- A. Water
- B. Soap
- C. Sugar cane
- D. Unripe fruit

14. _____ is a product of neutralization.

- A. Acid
- B. Base
- C. Sugar
- D. Salt

15. The reaction of a base with an acid to produce salt and water only is known as _____.

- A. addition
- B. neutralization
- C. endothermic
- D. reversible

16. _____ is a scale which shows the degree of acidity and alkalinity.

- A. Acidity scale
- B. Alkalinity scale
- C. pH scale
- D. Basic scale

17. Which of the following statements is NOT true about bases?

- A. Bases have a slippery or soapy feel.
- B. Bases turn red litmus paper blue.
- C. Bases turn blue litmus paper red.
- D. Bases could be corrosive.

18. $\text{NaOH} + \text{HCl} \longrightarrow \text{NaCl} + \text{H}_2\text{O}$ is an example of a _____ reaction.

- A. joint
- B. positive
- C. negative
- D. neutralization

19. An alkali will turn red litmus to _____.

- A. blue
- B. green
- C. red
- D. yellow

20. The reaction whereby a base reacts with an acid to produce salt and water only is called a _____ reaction.

- A. joint
- B. positive
- C. negative
- D. neutralization

21. There are ____ types of litmus paper.

- A. 5
- B. 4
- C. 3
- D. 2

22. When an acid is able to form two series of salts, the acid is termed to be ____.

- A. very strong
- B. dibasic
- C. tribasic
- D. quite dilute

TOPIC: ATOMIC STRUCTURE

DIRECTION: Choose the correct answer from the lettered options.

1. An atom is made up of _____ particles.
 - A. elementary
 - B. divisible
 - C. indivisible
 - D. mixture

2. The electron carries a _____ electric charge.
 - A. neutral
 - B. positive
 - C. negative
 - D. full

3. The nucleus of an atom contains _____ and _____.
 - A. neutrons, electrons
 - B. protons, neutrons
 - C. protons, electrons
 - D. protons, atoms

4. Which of the following represents the different states of matter?
 - A. Solid, liquid, proton
 - B. Electron, proton, neutron
 - C. Solid, liquid, gas
 - D. Proton, neutron, gas

5. The charge of a proton is _____.
A. negative
B. neutral
C. dynamic
D. positive
6. Which of the following is NOT a compound?
A. Water
B. Iron
C. Common salt
D. Carbon dioxide
7. Matter is made of tiny particles called _____.
A. atoms
B. elements
C. mass
D. properties

The correct answer is option (A)

8. _____ is the formula for Carbon dioxide.
A. CO
B. CO₂
C. CaCO₃
D. Co₂

9. The basic idea of Dalton's Atomic theory is ____.

- A. all elements are composed of atoms, which are indivisible and indestructible particles
- B. compounds are formed by the joining of atoms of two or more elements in a definite whole number
- C. atoms of different elements are different, in particular, they have different masses
- D. all of the above

10. The second kind of hydrogen atom is called ____.

- A. hydrogen II
- B. tritium
- C. protium
- D. deuterium

11. Which of the following represents the fundamental unit of an atom?

- A. Solid, liquid, gas
- B. Electron, proton, neutron
- C. Electron, liquid, gas
- D. Proton, neutron, gas

12. Which one of the following is NOT a group C element?

- A. Cd
- B. Hg
- C. Au
- D. Ag

13. The sum of the protons and neutrons in the nucleus of an atom is known as _____.

- A. atomic number
- B. atomic weight
- C. atomic mass
- D. mass number

14. Which of the following is INCORRECT about electrons?

- A. Electrons are at a comparatively greater distance from the center of the atom.
- B. Electrons travel rapidly around its center.
- C. Electrons travel continually around its center.
- D. Electrons are positively charged.

15. The theory of atom was put forward by _____.

- A. John Dalton
- B. Charles Dalton
- C. Charles Wesley
- D. Sir Faraday

16. Atom is electrically neutral because _____.

- A. all the particles in the nucleus are neutral
- B. there is no current in the atom
- C. the number of electrons and protons are equal
- D. the number of protons and neutrons are equal

17. The volume of a gas increases when heated at constant pressure because the molecules of the gas _____.

- A. expands
- B. move further apart
- C. move more frequently
- D. become more massive

18. The charge of a neutron is _____.

- A. negative
- B. neutral
- C. active
- D. positive

19. The word atom is a Greek word meaning _____.

- A. small
- B. indivisible
- C. unseen
- D. visible

20. What is the name of the smallest unit of living things?

- A. Cell
- B. Atom
- C. Diatom
- D. Particle

21. What does the formula CH_4 mean?

- A. Two atoms of Carbon combines with four atoms of Hydrogen.
- B. One atom of Carbon combines with eight atoms of Hydrogen.
- C. One atom of Carbon combines with four atoms of Hydrogen.
- D. Two atoms of Carbon combines with eight atoms of Hydrogen.

22. A molecule of Hydrogen is represented by the chemical formula _____.

- A. O_2
- B. N_2
- C. H_2
- D. CH_4

23. Which one of the following substances is a compound?

- A. Carbon
- B. Hydrogen
- C. Oxygen
- D. Water

24. _____ is the Latin name for Mercury.

- A. Plumbum
- B. Aurum
- C. Kalium
- D. Hydrargyrum

25. What is the chemical formula of the compound formed when an atom of Oxygen combines with two atoms of Hydrogen?

- A. NH_3
- B. MgO
- C. H_2O
- D. O_2

26. Which one of the following is the name given to the smallest unit of non-living things?

- A. Cell
- B. Atom
- C. Diatom
- D. Particle

27. Which of the following carries negative charges?

- A. Protons
- B. Neutrons
- C. Electrons
- D. Electrons and protons

28. The number of protons in the nucleus of an atom is referred to as _____.

- A. mass number
- B. atomic number
- C. atomic mass
- D. atomic weight

29. Mass number has the ____ symbol.

- A. Z
- B. A
- C. D
- D. H

30. The particle with the smallest mass is the _____.

- A. atom
- B. electron
- C. neutron
- D. nucleon

31. How many types of Hydrogen atoms do we have?

- A. 1
- B. 2
- C. 3
- D. 4

32. A room in which scientific investigations are carried out is called _____.

- A. lavatory
- B. kitchen
- C. laboratory
- D. nursery

33. Which one of the following is a compound?

- A. Sodium
- B. Chlorine
- C. Common salt
- D. Gold

34. Matter is made up of particles called _____.
A. elements
B. compounds
C. atom
D. mixture
35. Hg is the symbol for _____ element.
A. mercury
B. sodium
C. lead
D. silver
36. Which one of the following is the symbol for Gold?
A. Na
B. Ag
C. Au
D. Cu
37. The nucleus of an atom contains _____.
A. neutrons and electron only
B. protons and neutrons only
C. protons and electrons only
D. protons, neutrons and electrons
38. What is the symbol for atomic number?
A. Z
B. A
C. D
D. H

39. There are ____ fundamental units of an atom.

- A. 1
- B. 2
- C. 3
- D. 4

40. A compound which contains two atoms of Hydrogen, one atom of Sulphur, and four atoms of Oxygen will have its formula as _____.

- A. HSO₄
- B. H₂SO₄
- C. HSO₂
- D. H₂SO₆

41. What is the Latin name for Gold?

- A. Argentum
- B. Aurum
- C. Natrium
- D. Ferrum

42. An element X has a mass number of 27 and 14 neutrons in the nucleus. What is the number of proton particles present in it?

- A. 27
- B. 14
- C. 13
- D. 10

TOPIC: CONTINUITY OF THE FAMILY

DIRECTION: Choose the correct answer from the lettered options.

1. An organism is said to be pure for a particular trait if the factors _____.
 - A. controlling the trait are not alike
 - B. controlling the trait are alike
 - C. controlling the trait are inherited from the parent
 - D. are sex-linked

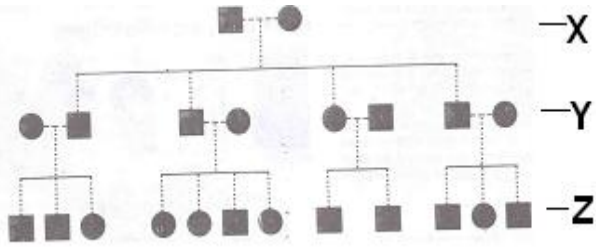
2. Which of the following statements is true?
 - A. When a dominant gene is present the recessive gene is also manifested.
 - B. When a dominant gene is present the recessive gene is not manifested.
 - C. When a dominant gene is present the recessive gene disappears completely.
 - D. When a dominant gene is present the recessive gene interacts with the dominant gene.
 - E. When a dominant gene is present the dominant eliminates the recessive gene.

3. Which one of the following abnormalities is NOT genetic?
 - A. Albinism
 - B. Colour blindness
 - C. Haemophilia
 - D. Leukemia

4. If a family includes a network of relationships, it is known as _____ family.
 - A. an extended
 - B. a maternal
 - C. a fraternal
 - D. a paternal

Use the diagram to answer the question.

5. The family tree above has ____ generations.



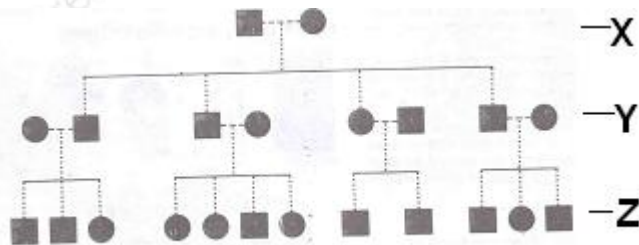
- A. 2
- B. 3
- C. 4
- D. 5

6. ____ is the specialized care given to a woman in labour and immediately after delivery.

- A. Ante-natal
- B. Intra-partum
- C. Post-natal
- D. Weaning

Use the diagram to answer the question.

7. The 2nd generation is the part labeled ____.



- A. X
- B. Y
- C. Z
- D. XY

TOPIC: ENERGY CONVERSION

DIRECTION: Choose the correct answer from the lettered options.

1. When a torch is used to light up a dark room, what energy conversions are likely to take place?
 - A. Chemical to light
 - B. Chemical to potential
 - C. Electrical to chemical
 - D. Electrical to heat

2. When a torchlight is switched on, chemical energy is converted to _____ energy.
 - A. kinetic
 - B. mechanical
 - C. light
 - D. heat

3. Mr. Bonier made a telephone call to his brother in Lagos. Which of the following is the correct sequence of to the receiver?
 - A. Sound - electrical - sound
 - B. Sound - mechanical - light
 - C. Sound chemical - sound
 - D. Sound - heat - light

4. An arrangement that converts chemical energy into electrical energy is called _____.
 - A. circuit
 - B. battery
 - C. connection
 - D. cell

5. Which one of the following is NOT an electrical appliance?
- A. Fan
 - B. Pressing iron
 - C. Television
 - D. Coal pot
6. Which of the following is a type of that takes place in a radio?
- A. Heat energy to electrical energy
 - B. Electrical to sound energy
 - C. Heat to sound energy
 - D. Heat sound to water energy
7. Which one of the following energy conversions occurs when a boy rides a bicycle?
- A. Electrical energy - mechanical energy
 - B. Mechanical energy - kinetic energy
 - C. Potential energy - mechanical energy
 - D. Kinetic energy - mechanical energy
8. In which of the following appliances is electrical energy converted to sound energy?
- A. Boiling Ring
 - B. Bulb
 - C. Cooker
 - D. Radio

9. Which takes place in a car battery?

- A. Chemical to electrical
- B. Chemical to light
- C. Chemical to mechanical
- D. Heat to chemical

10. The materials used in covering electrical conductors to prevent the flow of current to persons handling the conductors are called ____.

- A. insulators
- B. conductors
- C. switches
- D. fuse box

11. A simple electric circuit converts chemical energy to ____ energy.

- A. electrical
- B. heat
- C. kinetic
- D. mechanical

TOPIC: ENERGY TRANSFER

DIRECTION: Choose the correct answer from the lettered options.

1. Galileo invented the _____.
 - A. electric car
 - B. ceiling fan
 - C. light bulb
 - D. mechanical clock

2. The heat from a fire in a closed room reaches someone in the room mainly by _____.
 - A. convection
 - B. conduction
 - C. diffusion
 - D. radiation

3. There are _____ types of heat transfer?
 - A. 5
 - B. 4
 - C. 3
 - D. 2

4. The SI unit for measuring voltage is _____.
 - A. voltage
 - B. voltmeter
 - C. volts
 - D. kilogramme

5. In a vacuum, heat can travel by ____.
- A. convection and radiation
 - B. conduction and radiation
 - C. radiation only
 - D. conduction and convection
6. Current is measured in ____.
- A. ammeters
 - B. voltmeter
 - C. wattmeter
 - D. amperes
7. ____ converts chemical energy into electrical energy.
- A. Circuit
 - B. Battery
 - C. Connection
 - D. Cell
8. What is fuse wire?
- A. It is a wire with high melting point.
 - B. It is a wire with low melting point.
 - C. It is an insulator.
 - D. a wire which decreases the resistance in an electric circuit.
9. What is a fuse used for?
- A. To prevent the plug from burning.
 - B. To connect the circuit.
 - C. To prevent the damage of electrical appliances.
 - D. To prevent electric shock.

10. Which of the following is an insulator?

- A. Aluminum
- B. Copper
- C. Iron
- D. Plastic

11. Spaces round about us are really not empty but filled with ____.

- A. air
- B. oxygen
- C. gaseous substances
- D. water

12. The electrode connected to the positive terminal of the battery is called ____.

- A. cathode
- B. cation
- C. ion
- D. anode

13. Which of the following set is a non-conductor?

- A. Copper, aluminum and steel.
- B. Rubber, wood and plastic.
- C. Water, iron and brass.
- D. Silver, human body and gold.

14. The earth wire is used for ____.

- A. breaking circuit
- B. connecting circuit
- C. increasing electric current
- D. preventing electric shock

15. A safety device used in electrical appliances is called ____.

- A. an ammeter
- B. a fuse
- C. a lamp
- D. a switch

16. Echoes of sound occur as a result of ____ of sound waves.

- A. reaction
- B. refraction
- C. diffraction
- D. reflection

17. Which of the following groups are insulators?

- A. Copper and glass
- B. Glass, plastic and ebonite
- C. Silver, glass and copper
- D. Copper, ebonite and glass

18. Current that flows only in one direction is called ____.

- A. power
- B. direct current
- C. alternate current
- D. electrical current

19. Which of the following sounds is reflected back to us just as it sounded after few seconds?

- A. Echo
- B. Noise
- C. Vibration
- D. Microphone

TOPIC: EROSION AND FLOODING

DIRECTION: Choose the correct answer from the lettered options.

1. The breaking down of rocks is called _____.
 - A. erosion
 - B. weathering
 - C. leaching
 - D. flooding

2. How are rocks and minerals related?
 - A. They look alike.
 - B. They are the same thing.
 - C. Minerals are made of rocks.
 - D. Rocks are made of minerals.

3. The name of the chemical substance added to the soil to enrich it is called _____.
 - A. nitrogen
 - B. manure
 - C. fertilizer
 - D. humus

4. A flat area of land which has been formed by flooding of rivers is referred to as _____.
 - A. flood plain
 - B. wetland
 - C. flooded area
 - D. isobar

5. Which one of the following does NOT cause soil erosion?

- A. Afforestation
- B. Overgrazing
- C. Over cultivation
- D. Lumbering

6. The horizontal washing away of soil particles by wind or water is known as _____.

- A. erosion
- B. irrigation
- C. leaching
- D. composting

7. The removal of excess water from land is called _____.

- A. irrigation
- B. leaching
- C. contour
- D. drainage

8. In Agro-forestry, trees and _____ are grown on the same piece of land.

- A. cattle
- B. crops
- C. grasses
- D. weeds

9. Which one of the following is NOT true about erosion?

- A. It is a natural process that washes away top soil.
- B. It is faster on sloping land.
- C. It is increased by clearing our forests.
- D. It is prevented by cutting down trees.

10. There are ____ types of erosion.

- A. 5
- B. 4
- C. 3
- D. 2

TOPIC: FEEDING IN PLANTS AND ANIMALS

DIRECTION: Choose the correct answer from the lettered options.

1. The process by which green plants manufacture their own food is called _____.

- A. osmosis
- B. photosynthesis
- C. plasmolysis
- D. respiration

2. _____, _____ and _____ are necessary for plant to make their own food.

- A. Sunlight, carbondioxide, chlorophyll
- B. Carbondioxide, oxygen, nitrogen
- C. Chlorophyll, nitrates, water
- D. Chlorophyll alone

3. Living organisms that can manufacture their own food are referred to as _____.

- A. heterotrophs
- B. carnivores
- C. omnivores
- D. autotrophs

The correct answer is option (D)

4. The second set of teeth in mammals is called the _____ teeth.

- A. canine
- B. permanent
- C. milk
- D. molar

5. _____ is the number and types of teeth present in a mammal and their arrangement in the lower and upper jawbones.

- A. Arrangement
- B. Dentition
- C. Incisors
- D. Dental formula

6. An organism is said to be _____ when it feeds on dead plants and animals.

- A. autotrophic
- B. carnivorous
- C. parasitic
- D. saprophytic

7. Chlorophyll which is contained in the chloroplast is present only in _____.

- A. green plants
- B. animals
- C. fungi
- D. yellow parts of plant

The correct answer is option (A)

8. The number of teeth that an animal has and their types is represented by a _____.

- A. dental structure
- B. dental composition
- C. dental formula
- D. dentition

9. ____ test can be used to confirm that a plant takes up carbondioxide.

- A. Fehling
- B. Million's reagent
- C. Sugar
- D. Hydrogentrioxocarbonate (iv) indicator

10. What is the dental formular for man?

- A. I-0/3 C-0/1 P-3/3 M-3/3
- B. I-3/3 C-1/1 P-3/2 M-1/1
- C. I-2/2 C-1/1 P-1/1
- D. I-2/2 C-1/1 P-2/2 M-3/3

11. Which one of the following is NOT a source of carbohydrate?

- A. Cocoyam
- B. Corn
- C. Groundnut
- D. Millet

12. The movement of gaseous particles between other particles is called ____.

- A. osmosis
- B. diffusion
- C. movement
- D. relocation

13. The function of the teeth in our mouth is to ____.

- A. arrange food inside our mouth
- B. breakdown our food
- C. destroy the food we eat
- D. digest food

14. To test for starch in a green leaf, the leaf is normally boiled to _____.

- A. isolate the starch
- B. kill the protoplasm
- C. kill the germs of the leaf
- D. kill the leaf

15. _____ is the dentition of a cow.

- A. I- 0/3 M- 3/3
- B. I- 1/1 C- 0/1 P- 1/1 M- 3/3
- C. I- 3/3 C-3/1 P- 3/3
- D. I- 0/3 C- 0/1 P- 3/3 M- 3/3

16. The gas that is most useful to plants for food production is _____.

- A. oxygen
- B. carbon (iv) oxide
- C. carbon monoxide
- D. water vapour

17. The incisors and canine of man are used for _____ and _____.

- A. chewing, crushing
- B. crushing, sucking
- C. biting, cutting
- D. tearing, grinding

18. The dentition of a cat is

- A. I- 3/2 C- 2/1 P- 3/2 M- 1/1
- B. I- 3/3 C- 1/1 P- 3/2
- C. I- 3/3 C- 1/1 P- 3/2 M- 1/1
- D. I- 3/1 P- 2/2 M- 1/2

19. The process by which plants make starch is called ____.

- A. osmosis
- B. diffusion
- C. photosynthesis
- D. feeding

20. A dog feeds on flesh and therefore, it is called a ____.

- A. carnivore
- B. herbivore
- C. omnivore
- D. scavenger

TOPIC: MAN IN SPACE

DIRECTION: Choose the correct answer from the lettered options.

1. The first man to step on the moon is called _____.
 - A. Neil Armstrong
 - B. Thomas Edison
 - C. Wilbur Wright
 - D. Albert Einstein

2. The speed of sound is highest in _____.
 - A. water
 - B. solids
 - C. vacuum
 - D. alcohol

3. The moon moves round the earth due to the _____.
 - A. spinning of the earth
 - B. revolution of the earth
 - C. moment of inertia
 - D. gravitational force

4. Why do fruits fall to the ground from a tree and do not rise upward?
 - A. It is due to centrifugal force.
 - B. It is due to the mechanical energy of the tree.
 - C. It is due to gravitational force.
 - D. It is due to weightlessness.

5. The _____ of an object with the same amount of material varies when moved from place to place.

- A. mass
- B. weight
- C. colour
- D. width

6. The sound in the sun is not heard on the earth because _____.

- A. sound does not travel in a vacuum
- B. the velocity of a sound wave is small
- C. a sound wave is completely absorbed by the atmosphere
- D. a sound wave is reflected back by the earth

7. Which of the following people will experience weightlessness?

- A. A sick person
- B. An astronaut
- C. A doctor
- D. An engineer

8. The amount of force with which gravity pulls an object depends on the following EXCEPT _____.

- A. the mass of the object
- B. the mass of the earth
- C. the distance between the center of the object and the earth
- D. the shape of the object

9. One of the major problems faced by men who travel into space is _____.

- A. hunger
- B. lack of water
- C. loss of weight
- D. extreme cold

10. The _____ of an object containing the same amount of material remains constant when moved from place to place.

- A. mass
- B. weight
- C. gravitational pull
- D. centrifugal force

11. Which of the following factors attract bodies to the centre of the earth?

- A. Electric force
- B. Force of gravity
- C. Magnetic force
- D. Force of attraction

TOPIC: METALS AND NON-METALS

DIRECTION: Choose the correct answer from the lettered options.

1. When metals react with steam, the products are hydrogen and the oxide of the metal. This suggests that ____.

- A. water is an electrolyte
- B. water is a non-electrolyte
- C. water is composed of hydrogen and oxygen
- D. steam is very reactive when hot

2. Which one of the following is a yellow metal that is an alloy of copper and zinc?

- A. Bronze
- B. Brass
- C. Solder
- D. Aluminum

3. Brass is an alloy of ____ and ____.

- A. lead, tin
- B. copper, tin
- C. zinc, copper
- D. lead, copper

4. The main impurity in the iron ore is ____.

- A. calcium oxide
- B. silicon (IV) oxide
- C. calcium trioxosilicate (IV)
- D. carbon (IV) oxide

5. Which one of the following is NOT a property of metals?

- A. Brittle
- B. Ductile
- C. Conductor
- D. Lustrous

6. ____ and ____ are metals that will react with steam, giving off hydrogen.

- A. iron, calcium
- B. sodium, iron
- C. potassium, magnesium
- D. magnesium, iron

7. Which one of the following is NOT an oxide of metals?

- A. Acidic oxides
- B. Basic oxides
- C. Amphoteric oxides
- D. Peroxides

8. Which of the following non-metallic elements is used in the manufacture of vulcanized rubber and explosives?

- A. Oxygen
- B. Sulphur
- C. Helium
- D. Phosphorus

9. ____ and ____ are metals that react with steam to give off hydrogen.
- A. Iron, calcium
 - B. Sodium, iron
 - C. Potassium, magnesium
 - D. Magnesium, iron
10. Which of the following metals is the most reactive in the activity series?
- A. CA
 - B. Cu
 - C. K
 - D. Mg
11. A gas that would turn a solution of freshly prepared limewater milky is ____.
- A. ammonia
 - B. carbon (iv) oxide
 - C. hydrogen
 - D. nitrogen
12. An alloy is a mixture of ____.
- A. gases
 - B. compounds
 - C. metals
 - D. all of the above

13. What gas will be produced when diluted hydrochloric acid is reacted with granulated zinc?

- A. Carbon (iv) oxide
- B. Chlorine
- C. Hydrogen
- D. Nitrogen

14. Which of these metals will NOT replace the hydrogen of water or dilute acids?

- A. Sodium
- B. Potassium
- C. Copper
- D. Magnesium

15. Steel is an alloy of _____.

- A. calcium and tin
- B. carbon and iron
- C. carbon and lead
- D. iron and calcium

16. A substance was examined and found to possess the following properties:

- (i) it does not conduct electricity and heat
- (ii) it is not ductile

The substance is most likely to be _____.

- A. an ion
- B. a metal
- C. a gas
- D. a non-metal

17. If a metal can be drawn into wires relatively easily, it is called ____.

- A. malleable
- B. ductile
- C. extractive
- D. tactile

18. The most important ore from which iron is commonly extracted is ____.

- A. haematite
- B. bauxite
- C. magnetite
- D. iron sulphate

19. The arrangement of in their order of reactivity is called ____.

- A. metal series
- B. non - metal series
- C. activity series
- D. arrangement series

20. Tin ore is a mineral mined at _____, Nigeria.

- A. Aladja
- B. Ibadan
- C. Jos
- D. Kaduna

21. Metallic iron is coated with zinc in order to ____.

- A. give it a shiny appearance
- B. make it non-reactive
- C. prevent rusting
- D. make it denser

22. Which of the following chemical substances is a metal?

- A. Iodine
- B. Nickel
- C. Carbon
- D. Phosphorus

23. What is the name of the alloy made up to 50% tin and 50% lead?

- A. Brass
- B. Bronze
- C. Gold
- D. Solder

24. Which of the following metals is the most electropositive?

- A. Calcium
- B. Copper
- C. Lead
- D. Silver

25. Which of these metals cannot produce hydrogen gas when it reacts with dilute tetraoxosulphate (vi) acid?

- A. Sodium
- B. Silver
- C. Potassium
- D. Zinc

26. Steel is an alloy consisting of iron and ____.

- A. tin
- B. copper
- C. gold
- D. carbon

TOPIC: NERVOUS SYSTEM

DIRECTION: Choose the correct answer from the lettered options.

1. Which one of the following is NOT a reflex action?
 - A. Sneezing
 - B. Coughing
 - C. Eye blinking
 - D. Killing

2. The is made up of ____ main parts.
 - A. 2
 - B. 3
 - C. 4
 - D. 5

3. Which one of the following organs on the human body is used to detect taste?
 - A. Eye
 - B. Mouth
 - C. Tongue
 - D. Ear

4. Which part of the mammalian ear is responsible for balance in the body?
 - A. Semicircular canal
 - B. Cochlea
 - C. Ear drum
 - D. Eustachian tube

5. Which of the following is an organ on the human body that is used to detect sound?

- A. Eye
- B. Mouth
- C. Tongue
- D. Ear

6. Which one of the following is an example of a reflex action?

- A. Eating
- B. Yawning
- C. Jerking
- D. Running

7. The part of the eye that is sensitive to light is the _____.

- A. cornea
- B. iris
- C. retina
- D. pupil

8. _____ is the cell or tissue which responds to stimulus.

- A. Effector
- B. Motor neurone
- C. Sensory neurone
- D. Receptor

9. Which of the following eye defects can be corrected by using a diverging lens?

- A. Astigmatism
- B. Colour blindness
- C. Myopia
- D. Hypermyopia

10. Which one of the following is NOT an eye defect?

- A. astigmatism
- B. colour blindness.
- C. hypermetropia
- D. pneumonia

11. Blindness can be caused by ____ and ____.

- A. sleep, exercise
- B. balanced, unbalanced diet
- C. lack of sugar, water
- D. lack of vitamin A, poor diet

12. The main parts of the are ____, ____ and ____.

- A. central nervous system, autonomic nervous system, peripheral
- B. central nervous system, heteronomic nervous system, peripheral
- C. central nervous system, heteronomy nervous system, autonomic
- D. central nervous system, hetero-peripheral nervous system, heteronomy
- E. peripheral nervous system, autonomic nervous system, heteronomy

13. In normal vision, the image is formed exactly on the _____.

- A. retina
- B. optic nerve
- C. sclera
- D. choroid

14. There are ____ main defects of the eye.

- A. 2
- B. 3
- C. 4
- D. 5

15. Damage of the _____ can cause loss of sense of feeling and partial paralysis.

- A. spinal cord
- B. cerebrum
- C. cerebellum
- D. brain

16. The response to the stimulus of a sharp object on the hand is to _____.

- A. endure the pain
- B. run away
- C. remove the hand quickly
- D. blink the eyes

17. Response to reflex action comes from the _____.

- A. brain
- B. spinal cord
- C. peripheral nerves
- D. sense organs

18. The organ used for detecting taste is called the _____.

- A. ear
- B. tongue
- C. nose
- D. mouth

19. The central is part of the _____.

- A. sense organs
- B. brain
- C. spinal cord
- D. Nervous system

20. A person who has difficulty in seeing objects that are near is said to be suffering from _____.

- A. astigmatism
- B. short sightedness
- C. long sightedness
- D. night blindness

21. A reflex action is also known as _____ action.

- A. voluntary
- B. involuntary
- C. rough
- D. smooth

The correct option is option [B]

22. The ____ receives a stimulus before passing it to the sensory neurone.

- A. effector
- B. motor neurone
- C. association neurone
- D. receptor

23. The way we feel after receiving and responding to a stimulus is called ____.

- A. effector
- B. motor neurone
- C. sensation
- D. receptor

24. The nerve fibers that connect the eyes to the brain are called ____ nerves.

- A. light
- B. eye
- C. auditory
- D. optic

25. To which of the following does the human eye respond?

- A. Odour
- B. Music
- C. Light
- D. Pressure

26. ____, ____ and ____ are the main defects of the eye.

- A. Hypermetropia, myopia, astigmatism
- B. Hypometropia, myopia, astigmatism
- C. Myopia, astigmatism, night blindness
- D. Hypermetropia, astigmatism, colour blindness

27. The growth of plants towards water is called ____.

- A. phototropism
- B. geotropism
- C. tropism
- D. hydrotropism

28. The stimulus that comes from the outside is received by a nerve called ____.

- A. receptor neuron
- B. motor neuron
- C. sensory neuron
- D. receptor

29. What does the body do after receiving a stimulus?

- A. It responds
- B. It stimulates
- C. It grows
- D. It stays calm

30. Anything that incites activity in any part of the body is called ____.

- A. growth
- B. stimulus
- C. action
- D. activity

31. What organ of the body can be likened to a photographic instrument?

- A. Camera
- B. Eye
- C. Light detector
- D. Nose

32. A reaction to a stimulus which CANNOT be controlled is referred to as a _____.

- A. sensation
- B. stimuli
- C. reflex action
- D. response

33. The central is made up of ____ and brain.

- A. ganglion
- B. motor neuron
- C. spinal cord
- D. sensory neuron

TOPIC: POLLUTION

DIRECTION: Choose the correct answer from the lettered options.

1. Air can lead to _____.
 - A. outbreak of diseases
 - B. eradication of diseases
 - C. a clean and healthy environment
 - D. increase in the natural life of a place

2. When oil spills in an environment, it will lead to the following EXCEPT _____.
 - A. loss of farmlands
 - B. water
 - C. loss of fishing ponds
 - D. flooding

3. _____ is a compound, a common component of air but protects life in the upper atmosphere?
 - A. Oxygen
 - B. Hydrogen
 - C. Ozone
 - D. Carbon

4. Gravitational field differs from magnetic field in that gravitational field _____.
 - A. only attract objects while magnetic field attract and repel objects
 - B. attracts and repels objects while magnetic field only attract objects
 - C. only repel objects while magnetic field only attract objects
 - D. none of the above

5. Which one of the following is NOT an example of water pollutant?

- A. Acid rain
- B. Carbon (IV) oxide
- C. Oxygen
- D. Tetraoxophosphates

6. Gas flaring leads to all the following EXCEPT _____.

- A. acid rain
- B. eclipse
- C. global warming
- D. air

7. _____ can be described as the act of damaging pipelines to tap oil.

- A. Vandalization
- B. Bunkering
- C. Pollution
- D. Stealing

8. One side effect of oil production in Nigeria is _____.

- A. poverty
- B. wealth
- C. water
- D. none of the above

9. Which of the following will NOT pollute the air?

- A. Carbon monoxide
- B. Sulphur (IV) oxide
- C. High concentration of carbon dioxide
- D. Atmospheric oxygen

10. Which of the following is a major pollutant of water?

- A. Agricultural fertilizer
- B. Water
- C. Sewage and dust particles
- D. Oil

TOPIC: RESOURCES FROM LIVING THINGS

DIRECTION: Choose the correct answer from the lettered options.

1. The following are useful things animals can provide EXCEPT _____.
 - A. wool and fur
 - B. cotton
 - C. ivory
 - D. glue

2. Which of these is NOT one of the four major types of plants?
 - A. Food crops
 - B. Fruit crops
 - C. Cash crops
 - D. Medicinal crops

3. Which of the following is NOT a fruit?
 - A. Orange
 - B. Guava
 - C. Mango
 - D. Carrot

4. Which of the following is a cash crop in Nigeria?
 - A. Beans
 - B. Cocoa
 - C. Corn
 - D. Rice

5. Paper is made from _____.

- A. softwood
- B. cotton
- C. hardwood
- D. hides

6. Cash crops are crops produced mainly for _____.

- A. storage
- B. sale
- C. food
- D. entertainment

7. The useful things that we get from living things can be called _____.

- A. resources
- B. cinfores
- C. materials
- D. food

8. Which of the following is NOT a root crop?

- A. Cashew
- B. Cassava
- C. Cocoyam
- D. Sweet potatoes

9. Which of the following is NOT a way of preserving food crops?

- A. Salting
- B. Smoking
- C. Burning
- D. Processing

10. Sacks and nets are produced from the following EXCEPT _____.

- A. jute
- B. sisal
- C. hides
- D. sorrel plant

11. Hides and skin provide man with the following products EXCEPT _____.

- A. bags
- B. garments
- C. dyes
- D. shoes

TOPIC: WEATHER

DIRECTION: Choose the correct answer from the lettered options.

1. _____ is the scientific study of the atmosphere and the changes that take place in the weather.

- A. Thermometer
- B. Barometer
- C. Spectrometer
- D. Meteorology

2. The instrument used in obtaining the direction of wind is _____.

- A. thermometer
- B. wind vane
- C. wind - voltammeter
- D. mercury barometer

3. To determine wind speed at stations, we use _____.

- A. a barometer
- B. an ammeter
- C. a meteorology
- D. an anemometer

4. Air pressure is measured with _____.

- A. a thermometer
- B. an air - gauge
- C. a voltmeter
- D. a barometer

5. Which one of the following instruments is used for measuring air pressure?

- A. Barometer
- B. Hygrometer
- C. Photometer
- D. Thermometer

6. The process of breaking down of the earth's surface is called _____.

- A. erosion
- B. hurricane Catherina
- C. weathering
- D. earth break

7. _____ is an instrument used to measure the amount of rainfall recorded in a given place and at a given period of time.

- A. Barometer
- B. Hydrometer
- C. Wind vane
- D. A Ranguage

8. The type of instrument normally used to measure the amount of water vapour in the air is called _____.

- A. barometer
- B. waltmeter
- C. wet and dry bulb thermometer
- D. rain - gauge

9. Which of the following is the term given to the amount of water vapor in the air?

- A. Climate
- B. Vaporization
- C. Humidity
- D. Water volume

10. What is the name of the scientific study of the atmosphere and the changes that take place in weather?

- A. Meteorology
- B. Weatherology
- C. Humidology
- D. Weathering

11. Which of the following does NOT affect weather?

- A. Rainfall
- B. Sunshine
- C. Autumn
- D. Wind

12. Wind is caused by _____ .

- A. the appearance of sun
- B. cloud cover
- C. cloud formation
- D. difference in air pressure

13. The lines drawn on a map that joins places of equal temperature are called _____.

- A. isotherms
- B. isobars
- C. isonets
- D. contours

14. The lines on a map which joins places of equal air pressures are called _____.

- A. isotherms
- B. isobars
- C. isohytes
- D. contours

15. Wet and dry bulb thermometer is also known as _____.

- A. waltmeter
- B. witmeter
- C. thermometer
- D. psychrometer

16. Which of the following falls to the earth as rain?

- A. Moon
- B. Sun
- C. Cloud
- D. Liquid precipitation

17. _____ is the ratio of the amount of moisture in the air compared with the amount of moisture the air could hold if it is completely saturated.

- A. Relative humidity
- B. Atmospheric pressure
- C. Relative rainfall
- D. Relative sunshine

18. Which of the following does a meteorologist most likely observe?

- A. Atmospheric pressure
- B. Climate
- C. Precipitation
- D. Condensation

19. The science of weight and measures is called _____.

- A. metrology
- B. meteorology
- C. mineralogy
- D. morphology

20. The state or condition of the atmosphere at a given point in time is called _____.

- A. atmosphere
- B. cloud
- C. Weather
- D. humidity

21. A wind vane is used to measure _____.

- A. wind direction
- B. wind power
- C. wind volume
- D. wind speed

22. Change is affected by _____.

- A. rainfall
- B. atmospheric temperature
- C. sunshine
- D. all of the above

TOPIC: WORK AND ENERGY

DIRECTION: Choose the correct answer from the lettered options.

1. Which one of these is NOT an agricultural tool?
 - A. Shovel
 - B. Cutlass
 - C. Hoe
 - D. Saw

2. If the mechanical advantage of a machine is 0.4, what is the load on it when an effort of 160N is applied?
 - A. 640N
 - B. 400N
 - C. 64N
 - D. 40N

3. The ratio of load over effort is the _____ of a machine.
 - A. efficiency
 - B. work done
 - C. mechanical advantage
 - D. work output

4. Why is the efficiency of a machine always less than 100 percent?
 - A. Friction
 - B. Force ratio
 - C. Velocity ratio
 - D. Mechanical advantage

5. The unit of work done is calculated in _____.

- A. centimeter
- B. gramme
- C. joule
- D. meter

6. Energy due to motion is called _____ energy.

- A. kinetic
- B. mechanical
- C. potential
- D. motion

7. What is the kinetic energy in joules of a body of mass 6.5kg moving with a velocity of 8ms^{-1} ?

- A. 26
- B. 52
- C. 104
- D. 208

8. What is efficiency?

- A. It is the ratio of the work input to the work output of a machine.
- B. It is the ratio of the work output to the work input of a machine.
- C. It is the product of the work output to the work input of a machine.
- D. It is the sum of the work output to the work input of a machine.

9. Which of the following is a form of energy?

- A. Potential energy
- B. Kinetic energy
- C. Mechanical energy
- D. All of the above

10. What is the work done when a force of 15N moves a distance of 5m?

- A. 3J
- B. 10J
- C. 20J
- D. 75J

11. Energy stored is called _____ energy.

- A. kinetic
- B. mechanical
- C. potential
- D. biological

TOPIC: WRITING CHEMICAL EQUATION

DIRECTION: Choose the correct answer from the lettered options.

1. When people hang their clothes out to dry, what happens during the process of drying?

- A. Evaporation
- B. Melting
- C. Condensation
- D. Sublimation

2. The Latin name for Potassium is _____.

- A. ferrum
- B. natrium
- C. cuprum
- D. kalium

3. Whenever a substance undergoes a chemical change, a chemical reaction takes place.

- A. True
- B. False

4. Which of the following is the symbol for nitrogen?

- A. Ne
- B. N
- C. Na
- D. Mn

5. Co is the symbol for _____.

- A. Chlorine
- B. Copper
- C. Calcium
- D. Cobalt

6. _____ is the symbol for the element fluorine.

- A. Fe
- B. Fn
- C. Fo
- D. F

7. A molecule of calcium trioxocarbonate (IV) contains _____ atoms.

- A. 5
- B. 4
- C. 3
- D. 2

8. The reaction of Magnesium + Water \rightarrow Magnesium Oxide + Hydrogen takes place only in the presence of _____.

- A. excess magnesium ribbon
- B. excess cold water
- C. steam
- D. very hot water

9. Which of the following is the symbol for phosphorus?

- A. Pb
- B. Pt
- C. K
- D. P

10. In _____ elements, the symbols are the first letter of the name of the element.

- A. group A
- B. group B1
- C. group B2
- D. group C

11. The element oxygen, belongs to group _____.

- A. A
- B. B1
- C. B2
- D. C

12. Cation is referred to as ion that is _____ charged.

- A. negatively
- B. neutral
- C. positively
- D. naturally

13. An atom which carries a charge is called _____.

- A. ion
- B. atomic charge
- C. net charge
- D. iron

14. K is the symbol for _____ element.

- A. sodium
- B. mercury
- C. potassium
- D. calcium

15. The loss or gain of an electron by an atom produces _____.

- A. a compound
- B. an element
- C. an ion
- D. a molecule

16. Which of the following shows a balanced equation for the neutralization reaction of sodium hydroxide and tetraoxosulphate (V)?

- A. $\text{NaOH} + \text{H}_2\text{SO}_3 \rightarrow \text{NaSO}_3 + 2\text{H}_2\text{O}$
- B. $2\text{NaOH} + \text{H}_2\text{SO}_3 \rightarrow \text{Na}_2\text{SO}_4 + 2\text{H}_2\text{O}$
- C. $\text{NaOH} + \text{H}_2\text{SO}_4 \rightarrow \text{NaSO}_4 + \text{NaSO}_4 + \text{H}_2\text{O}$
- D. $\text{NaOH} + 2\text{H}_2\text{SO}_4 \rightarrow \text{Na}_2\text{SO}_4 + \text{H}_2\text{O}$

17. Which of the following statements about elements is INCORRECT? .

- A. An element consists of only one kind of matter.
- B. An element cannot be separated into more than one type of substance.
- C. Elements are substances that can be broken down into anything else.
- D. When elements are mixed together without any chemical reaction, a mixture is obtained.
- E. The element gold contains no other substance except gold.

18. Which of the following is the symbol for sodium?

- A. Fe
- B. Na
- C. Hg
- D. Pb

19. The symbol for Helium is _____.

- A. HE
- B. hE
- C. He
- D. he

20. Li is a group ____ element.

- A. A
- B. B1
- C. B2
- D. C

21. The chemical formula for Iron (iii) oxide is _____.

- A. FeO
- B. Fe₂O
- C. Fe₂O₃
- D. Fe₃O₂

22. What is the chemical name for common salt?

- A. Potassium Chloride
- B. Calcium Chloride
- C. Sodium Chloride
- D. Ammonium Chloride

23. The Latin name of elements is used to derive the symbol of _____.

- A. Group A
- B. Group B1
- C. Group B2
- D. Group C

24. _____ is a substance which contains two or more elements chemically combined.

- A. An atom
- B. An element
- C. A compound
- D. A yard

25. Which one of the following is NOT a group B1 element?

- A. Neon
- B. Platinum
- C. Calcium
- D. Cobalt

26. C is the symbol for _____ element.

- A. calcium
- B. chlorine
- C. carbon
- D. copper

27. Anion is referred to as the ion that is _____ charged.

- A. negatively
- B. positively
- C. neutrally
- D. lessly

28. Which of the following is the symbol for hydrogen?

- A. He
- B. H
- C. Hg
- D. Ag

29. The chemical formula of calcium trioxocarbonate (iv) is _____.

- A. CaCO_3
- B. CaCO_2
- C. CaSO_4
- D. $\text{Ca}(\text{Na}_3)_2$

30. Iodine is a group A element.

- A. True
- B. False

31. Given $\text{H}=1$, $\text{S}=32$, $\text{O}=16$, which of the following statements is correct concerning tetraoxosulphate (vi) acid with the formula H_2SO_4 ?

- A. It has a relative molecular mass of 98g.
- B. It has a gram formula of 49g.
- C. It has a molecular mass of 98g/mol.
- D. It has a gram formula of 98.

32. Which one of the following is the definition for a chemical formula?

- A. It is a substance which consists of only one kind of matter.
- B. It is a substance which contains two or more elements chemically combined.
- C. It is a representation of substances using symbols.
- D. It is a means of keeping an object free of germs or micro-organisms.

33. Which group does the element with the symbol S belong to?

- A. A.
- B. B1
- C. B2
- D. C

34. Which group derives their symbol from the first letter and another letter in the name of the element?

- A. Group A
- B. Group B1
- C. Group B2
- D. Group C

35. How many states of matter do we have?

- A. 1
- B. 2
- C. 3
- D. 4

36. Which one of these is NOT a Group B1 element?

- A. Mn
- B. Br
- C. Ba
- D. Be

37. _____ is the symbol for Beryllium.

- A. Be
- B. Ba
- C. Br
- D. B

38. What is the Latin name for Lead?

- A. Natrium
- B. Ferrum
- C. Plumbum
- D. Kalium

39. What is the symbol used for Sodium?

- A. So
- B. Na
- C. Sm
- D. K

40. Which of the following equations is NOT balanced?

- A. $\text{NaOH(aq)} + \text{HCl(aq)} \rightarrow \text{NaCl(aq)} + \text{H}_2\text{O(l)}$
- B. $\text{CuO(s)} + \text{H}_2\text{SO}_4\text{(aq)} \rightarrow \text{CuSO}_4\text{(aq)} + \text{H}_2\text{O (l)}$
- C. $\text{Zn(s)} + \text{H}_2\text{SO}_4\text{(aq)} \rightarrow \text{ZnSO}_4\text{(aq)} + \text{H}_2\text{(g)}$
- D. $\text{C(s)} + \text{O}_2\text{(g)} \rightarrow \text{CO(g)}$

41. A substance which contains two or more elements chemically combined is called _____.

- A. atom
- B. element
- C. compound
- D. equation

42. Br is the symbol for _____.

- A. barium
- B. bromine
- C. boron
- D. beryllium

ANSWERS

TOPIC: ACIDS, BASES AND SALTS

DIRECTION: Choose the correct answer from the lettered options.

1. Which one of the following is not true about acids?

- A. Acids have sweet taste.
- B. Acids have sour taste.
- C. Acids could be corrosive.
- D. Acids turn blue litmus red.

The correct answer is option [A]

2. Acidic substances turn blue litmus paper _____.

- A. purple
- B. green
- C. red
- D. yellow

The correct answer is option [C]

3. Basic substances turn red litmus paper _____.

- A. purple
- B. green
- C. blue
- D. yellow

The correct answer is option [C]

4. Bases which are readily soluble in water are called _____.

- A. basics
- B. acidic
- C. alkaline
- D. elements

The correct answer is option [C]

5. Bases have _____ pH values.

- A. high
- B. low
- C. positive
- D. neutral

The correct answer is option [A]

6. _____ is any hydroxide that dissolves in water to yield hydroxide ion (OH^-) as the only negative charge.

- A. Acid
- B. Base
- C. Sugar
- D. Salt

The correct answer is option [B]

7. When an acid can form two series of salts, the acid is termed _____.

- A. very strong
- B. dibasic
- C. an acid salt
- D. quite dilute

The correct answer is option [C]

8. Acids have _____ pH values.

- A. high
- B. low
- C. negative
- D. neutral

The correct answer is option [B]

9. The pH value of a neutral solution is _____.

- A. 5
- B. 6
- C. 7
- D. 8

The correct answer is option [C]

10. _____ is a substance that produces hydrogen ion (H^+) as the only positive ion when mixed with water.

- A. Base
- B. Salt
- C. Sugar
- D. Acid

The correct answer is option [D]

11. Litmus paper is referred to as _____.

- A. an activator
- B. a motivator
- C. an indicator
- D. a pointer

The correct answer is option [C]

12. An alkali will turn red litmus ____.

- A. white
- B. claret
- C. blue
- D. crimson

The correct answer is option [C]

13. Which of the following has a pH less than 7?

- A. Water
- B. Soap
- C. Sugar cane
- D. Unripe fruit

The correct answer is option [D]

14. ____ is a product of neutralization.

- A. Acid
- B. Base
- C. Sugar
- D. Salt

The correct answer is option [D]

15. The reaction of a base with an acid to produce salt and water only is known as ____.

- A. addition
- B. neutralization
- C. endothermic
- D. reversible

The correct answer is option [B]

16. _____ is a scale which shows the degree of acidity and alkalinity.

- A. Acidity scale
- B. Alkalinity scale
- C. pH scale
- D. Basic scale

The correct answer is option [C]

17. Which of the following statements is NOT true about bases?

- A. Bases have a slippery or soapy feel.
- B. Bases turn red litmus paper blue.
- C. Bases turn blue litmus paper red.
- D. Bases could be corrosive.

The correct answer is option [C]

18. $\text{NaOH} + \text{HCl} \rightarrow \text{NaCl} + \text{H}_2\text{O}$ is an example of a _____ reaction.

- A. joint
- B. positive
- C. negative
- D. neutralization

The correct answer is option [D]

19. An alkali will turn red litmus to _____.

- A. blue
- B. green
- C. red
- D. yellow

The correct answer is option [A]

20. The reaction whereby a base reacts with an acid to produce salt and water only is called a ____ reaction.

- A. joint
- B. positive
- C. negative
- D. neutralization

The correct answer is option [D]

21. There are ____ types of litmus paper.

- A. 5
- B. 4
- C. 3
- D. 2

The correct answer is option [D]

22. When an acid is able to form two series of salts, the acid is termed to be ____.

- A. very strong
- B. dibasic
- C. tribasic
- D. quite dilute

The correct answer is option [B]

TOPIC: ATOMIC STRUCTURE

DIRECTION: Choose the correct answer from the lettered options.

1. An atom is made up of _____ particles.

- A. elementary
- B. divisible
- C. indivisible
- D. mixture

The correct answer is option [C]

2. The electron carries a _____ electric charge.

- A. neutral
- B. positive
- C. negative
- D. full

The correct answer is option [C]

3. The nucleus of an atom contains _____ and _____.

- A. neutrons, electrons
- B. protons, neutrons
- C. protons, electrons
- D. protons, atoms

The correct answer is option [B]

4. Which of the following represents the different states of matter?

- A. Solid, liquid, proton
- B. Electron, proton, neutron
- C. Solid, liquid, gas
- D. Proton, neutron, gas

The correct answer is option [C]

5. The charge of a proton is _____.

- A. negative
- B. neutral
- C. dynamic
- D. positive

The correct answer is option [D]

6. Which of the following is NOT a compound?

- A. Water
- B. Iron
- C. Common salt
- D. Carbon dioxide

The Correct answer is option [B].

7. Matter is made of tiny particles called _____.

- A. atoms
- B. elements
- C. mass
- D. properties

The correct answer is option (A)

8. _____ is the formula for Carbon dioxide.

- A. CO
- B. CO₂
- C. CaCO₃
- D. Co₂

The correct answer is option [B]

9. The basic idea of Dalton's Atomic theory is _____.

- A. all elements are composed of atoms, which are indivisible and indestructible particles
- B. compounds are formed by the joining of atoms of two or more elements in a definite whole number
- C. atoms of different elements are different, in particular, they have different masses
- D. all of the above

The correct answer is option [D]

10. The second kind of hydrogen atom is called _____.

- A. hydrogen II
- B. tritium
- C. protium
- D. deuterium

The correct answer is option [D].

11. Which of the following represents the fundamental unit of an atom?

- A. Solid, liquid, gas
- B. Electron, proton, neutron
- C. Electron, liquid, gas
- D. Proton, neutron, gas

The correct answer is option [B]

12. Which one of the following is NOT a group C element?

- A. Cd
- B. Hg
- C. Au
- D. Ag

The correct answer is option [A]

13. The sum of the protons and neutrons in the nucleus of an atom is known as _____.

- A. atomic number
- B. atomic weight
- C. atomic mass
- D. mass number

The correct answer is option [D]

14. Which of the following is INCORRECT about electrons?

- A. Electrons are at a comparatively greater distance from the center of the atom.
- B. Electrons travel rapidly around its center.
- C. Electrons travel continually around its center.
- D. Electrons are positively charged.

The correct answer is option [D]

15. The theory of atom was put forward by _____.

- A. John Dalton
- B. Charles Dalton
- C. Charles Wesley
- D. Sir Faraday

The correct answer is option [A]

16. Atom is electrically neutral because _____ .

- A. all the particles in the nucleus are neutral
- B. there is no current in the atom
- C. the number of electrons and protons are equal
- D. the number of protons and neutrons are equal

The correct answer is option [C]

17. The volume of a gas increases when heated at constant pressure because the molecules of the gas _____.

- A. expands
- B. move further apart
- C. move more frequently
- D. become more massive

The correct answer is option [A].

18. The charge of a neutron is _____.

- A. negative
- B. neutral
- C. active
- D. positive

The correct answer is option [B]

19. The word atom is a Greek word meaning _____.

- A. small
- B. indivisible
- C. unseen
- D. visible

The correct answer is option [B]

20. What is the name of the smallest unit of living things?

- A. Cell
- B. Atom
- C. Diatom
- D. Particle

The Correct answer is option [A].

21. What does the formula CH_4 mean?

- A. Two atoms of Carbon combines with four atoms of Hydrogen.
- B. One atom of Carbon combines with eight atoms of Hydrogen.
- C. One atom of Carbon combines with four atoms of Hydrogen.
- D. Two atoms of Carbon combines with eight atoms of Hydrogen.

The correct answer is option [C]

22. A molecule of Hydrogen is represented by the chemical formula _____.

- A. O_2
- B. N_2
- C. H_2
- D. CH_4

The correct answer is option [C]

23. Which one of the following substances is a compound?

- A. Carbon
- B. Hydrogen
- C. Oxygen
- D. Water

The correct answer is option [D]

24. _____ is the Latin name for Mercury.

- A. Plumbum
- B. Aurum
- C. Kalium
- D. Hydrargyrum

The correct answer is option [D]

25. What is the chemical formula of the compound formed when an atom of Oxygen combines with two atoms of Hydrogen?

- A. NH₃
- B. MgO
- C. H₂O
- D. O₂

The correct answer is option [C]

26. Which one of the following is the name given to the smallest unit of non-living things?

- A. Cell
- B. Atom
- C. Diatom
- D. Particle

The Correct answer is option [B].

27. Which of the following carries negative charges?

- A. Protons
- B. Neutrons
- C. Electrons
- D. Electrons and protons

The correct answer is option [C]

28. The number of protons in the nucleus of an atom is referred to as _____.

- A. mass number
- B. atomic number
- C. atomic mass
- D. atomic weight

The correct answer is option [B]

29. Mass number has the ____ symbol.

- A. Z
- B. A
- C. D
- D. H

The correct answer is option [B]

30. The particle with the smallest mass is the _____.

- A. atom
- B. electron
- C. neutron
- D. nucleon

The correct answer is option [A].

31. How many types of Hydrogen atoms do we have?

- A. 1
- B. 2
- C. 3
- D. 4

The correct answer is option [C]

The atom is the smallest particle, while the electron is the smallest sub-particle.

32. A room in which scientific investigations are carried out is called _____ .

- A. lavatory
- B. kitchen
- C. laboratory
- D. nursery

The Correct answer is option [C].

33. Which one of the following is a compound?

- A. Sodium
- B. Chlorine
- C. Common salt
- D. Gold

The Correct answer is option [C].

34. Matter is made up of particles called _____.

- A. elements
- B. compounds
- C. atom
- D. mixture

The correct answer is option [C]

35. Hg is the symbol for _____ element.

- A. mercury
- B. sodium
- C. lead
- D. silver

The correct answer is option [A]

36. Which one of the following is the symbol for Gold?

- A. Na
- B. Ag
- C. Au
- D. Cu

The correct answer is option [C]

37. The nucleus of an atom contains ____.

- A. neutrons and electron only
- B. protons and neutrons only
- C. protons and electrons only
- D. protons, neutrons and electrons

The correct answer is option [B]

38. What is the symbol for atomic number?

- A. Z
- B. A
- C. D
- D. H

The correct answer is option [A]

39. There are ____ fundamental units of an atom.

- A. 1
- B. 2
- C. 3
- D. 4

The correct answer is option [C]

40. A compound which contains two atoms of Hydrogen, one atom of Sulphur, and four atoms of Oxygen will have its formula as _____.

- A. HSO₄
- B. H₂SO₄
- C. HSO₂
- D. H₂SO₆

The correct answer is option [B]

41. What is the Latin name for Gold?

- A. Argentum
- B. Aurum
- C. Natrium
- D. Ferrum

The correct answer is option [B]

42. An element X has a mass number of 27 and 14 neutrons in the nucleus. What is the number of proton particles present in it?

- A. 27
- B. 14
- C. 13
- D. 10

The correct answer is option [C]

Mass number = number of neutrons + number of protons.

Therefore, number of protons = mass number - number of neutrons = 27 - 14 = 13

TOPIC: CONTINUITY OF THE FAMILY

DIRECTION: Choose the correct answer from the lettered options.

1. An organism is said to be pure for a particular trait if the factors _____ .

- A. controlling the trait are not alike
- B. controlling the trait are alike
- C. controlling the trait are inherited from the parent
- D. are sex-linked

The correct answer is option [C].

2. Which of the following statements is true?

- A. When a dominant gene is present the recessive gene is also manifested.
- B. When a dominant gene is present the recessive gene is not manifested.
- C. When a dominant gene is present the recessive gene disappears completely.
- D. When a dominant gene is present the recessive gene interacts with the dominant gene.
- E. When a dominant gene is present the dominant eliminates the recessive gene.

The correct answer is option [B].

3. Which one of the following abnormalities is NOT genetic?

- A. Albinism
- B. Colour blindness
- C. Haemophilia
- D. Leukemia

The correct answer is option [D]

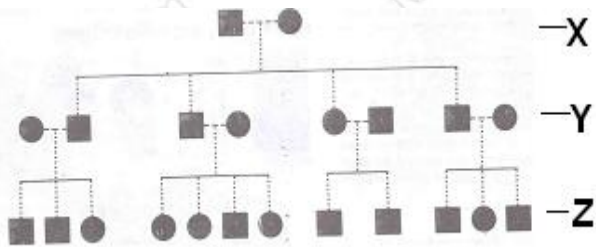
4. If a family includes a network of relationships, it is known as _____ family

- A. an extended
- B. a maternal
- C. a fraternal
- D. a paternal

The correct answer is option [A]

Use the diagram to answer the question.

5. The family tree above has _____ generations.



- A. 2
- B. 3
- C. 4
- D. 5

The correct answer is option [B]

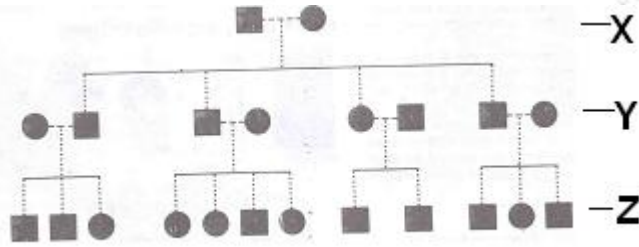
6. _____ is the specialized care given to a woman in labour and immediately after delivery.

- A. Ante-natal
- B. Intra-partum
- C. Post-natal
- D. Weaning

The correct answer is option [B]

Use the diagram to answer the question.

7. The 2nd generation is the part labeled _____.



- A. X
- B. Y
- C. Z
- D. XY

The correct answer is option [B]

TOPIC: ENERGY CONVERSION

DIRECTION: Choose the correct answer from the lettered options.

1. When a torch is used to light up a dark room, what energy conversions are likely to take place?

- A. Chemical to light
- B. Chemical to potential
- C. Electrical to chemical
- D. Electrical to heat

The correct answer is option [A]

2. When a torchlight is switched on, chemical energy is converted to _____ energy.

- A. kinetic
- B. mechanical
- C. light
- D. heat

The correct answer is option [C]

3. Mr. Bonier made a telephone call to his brother in Lagos. Which of the following is the correct sequence of to the receiver?

- A. Sound - electrical - sound
- B. Sound - mechanical - light
- C. Sound chemical - sound
- D. Sound - heat - light

The correct answer is option [A]

4. An arrangement that converts chemical energy into electrical energy is called _____.

- A. circuit
- B. battery
- C. connection
- D. cell

The correct answer is option [A]

5. Which one of the following is NOT an electrical appliance?

- A. Fan
- B. Pressing iron
- C. Television
- D. Coal pot

The correct answer is option [D]

6. Which of the following is a type of that takes place in a radio?

- A. Heat energy to electrical energy
- B. Electrical to sound energy
- C. Heat to sound energy
- D. Heat sound to water energy

The correct answer is option [B]

7. Which one of the following energy conversions occurs when a boy rides a bicycle?

- A. Electrical energy - mechanical energy
- B. Mechanical energy - kinetic energy
- C. Potential energy - mechanical energy
- D. Kinetic energy - mechanical energy

The correct answer is option [B]

8. In which of the following appliances is electrical energy converted to sound energy?

- A. Boiling Ring
- B. Bulb
- C. Cooker
- D. Radio

The correct answer is option [D]

9. Which takes place in a car battery?

- A. Chemical to electrical
- B. Chemical to light
- C. Chemical to mechanical
- D. Heat to chemical

The correct answer is option [A]

10. The materials used in covering electrical conductors to prevent the flow of current to persons handling the conductors are called _____.

- A. insulators
- B. conductors
- C. switches
- D. fuse box

The correct answer is option [A]

11. A simple electric circuit converts chemical energy to _____ energy.

- A. electrical
- B. heat
- C. kinetic
- D. mechanical

The correct answer is option [A]

TOPIC: ENERGY TRANSFER

DIRECTION: Choose the correct answer from the lettered options.

1. Galileo invented the _____.

- A. electric car
- B. ceiling fan
- C. light bulb
- D. mechanical clock

The correct answer is option [D]

2. The heat from a fire in a closed room reaches someone in the room mainly by _____.

- A. convection
- B. conduction
- C. diffusion
- D. radiation

The correct answer is option [A].

Convection is the transfer of heat by the movement of liquid/gaseous molecules.

3. There are _____ types of heat transfer?

- A. 5
- B. 4
- C. 3
- D. 2

The correct answer is option [C]

4. The SI unit for measuring voltage is ____.

- A. voltage
- B. voltmeter
- C. volts
- D. kilogramme

The correct answer is option [C]

5. In a vacuum, heat can travel by ____.

- A. convection and radiation
- B. conduction and radiation
- C. radiation only
- D. conduction and convection

The correct answer is option [A]

6. Current is measured in ____.

- A. ammeters
- B. voltmeter
- C. wattmeter
- D. amperes

The correct answer is option [D]

7. ____ converts chemical energy into electrical energy.

- A. Circuit
- B. Battery
- C. Connection
- D. Cell

The correct answer is option [A]

8. What is fuse wire?

- A. It is a wire with high melting point.
- B. It is a wire with low melting point.
- C. It is an insulator.
- D. a wire which decreases the resistance in an electric circuit.

The correct answer is option [D]

9. What is a fuse used for?

- A. To prevent the plug from burning.
- B. To connect the circuit.
- C. To prevent the damage of electrical appliances.
- D. To prevent electric shock.

The correct answer is option [C]

10. Which of the following is an insulator?

- A. Aluminum
- B. Copper
- C. Iron
- D. Plastic

The correct answer is option [D]

11. Spaces round about us are really not empty but filled with ____.

- A. air
- B. oxygen
- C. gaseous substances
- D. water

The correct answer is option [C]

12. The electrode connected to the positive terminal of the battery is called ____.

- A. cathode
- B. cation
- C. ion
- D. anode

The correct answer is option [D]

Electrode is an electrical conductor, usually in the form of a rod or plate, by which electricity enters or leaves a solution or gas. Cathode is the negative terminal of the battery which the electrode is connected to.

13. Which of the following set is a non-conductor?

- A. Copper, aluminum and steel.
- B. Rubber, wood and plastic.
- C. Water, iron and brass.
- D. Silver, human body and gold.

The correct answer is option [B]

Non-conductors are those objects that do not allow electricity to pass through them. It can also be called insulators.

14. The earth wire is used for ____.

- A. breaking circuit
- B. connecting circuit
- C. increasing electric current
- D. preventing electric shock

The correct answer is option [D]

15. A safety device used in electrical appliances is called ____.

- A. an ammeter
- B. a fuse
- C. a lamp
- D. a switch

The correct answer is option [B]

16. Echoes of sound occur as a result of ____ of sound waves.

- A. reaction
- B. refraction
- C. diffraction
- D. reflection

The correct answer is option [D]

17. Which of the following groups are insulators?

- A. Copper and glass
- B. Glass, plastic and ebonite
- C. Silver, glass and copper
- D. Copper, ebonite and glass

The correct answer is option [B].

Insulators are objects which do not allow electricity to pass through them.

18. Current that flows only in one direction is called ____.

- A. power
- B. direct current
- C. alternate current
- D. electrical current

The correct answer is option [B]

19. Which of the following sounds is reflected back to us just as it sounded after few seconds?

- A. Echo
- B. Noise
- C. Vibration
- D. Microphone

The correct answer is option [A]

A noise is a whole jumble of sound waves.

Music is the production of pleasant sounds.

TOPIC: EROSION AND FLOODING

DIRECTION: Choose the correct answer from the lettered options.

1. The breaking down of rocks is called _____.

- A. erosion
- B. weathering
- C. leaching
- D. flooding

The correct answer is option [B]

2. How are rocks and minerals related?

- A. They look alike.
- B. They are the same thing.
- C. Minerals are made of rocks.
- D. Rocks are made of minerals.

The correct answer is option [D]

3. The name of the chemical substance added to the soil to enrich it is called _____.

- A. nitrogen
- B. manure
- C. fertilizer
- D. humus

The correct answer is option [C]

4. A flat area of land which has been formed by flooding of rivers is referred to as _____.

- A. flood plain
- B. wetland
- C. flooded area
- D. isobar

The correct answer is option [A]

5. Which one of the following does NOT cause soil erosion?

- A. Afforestation
- B. Overgrazing
- C. Over cultivation
- D. Lumbering

The correct answer is option [A]

6. The horizontal washing away of soil particles by wind or water is known as _____.

- A. erosion
- B. irrigation
- C. leaching
- D. composting

The Correct answer is option [C].

7. The removal of excess water from land is called _____.

- A. irrigation
- B. leaching
- C. contour
- D. drainage

The correct answer is option [D]

8. In Agro-forestry, trees and ____ are grown on the same piece of land.

- A. cattle
- B. crops
- C. grasses
- D. weeds

The correct answer is option [B]

9. Which one of the following is NOT true about erosion?

- A. It is a natural process that washes away top soil.
- B. It is faster on sloping land.
- C. It is increased by clearing our forests.
- D. It is prevented by cutting down trees.

The correct answer is option [D]

10. There are ____ types of erosion.

- A. 5
- B. 4
- C. 3
- D. 2

The correct answer is option [D]

TOPIC: FEEDING IN PLANTS AND ANIMALS

DIRECTION: Choose the correct answer from the lettered options.

1. The process by which green plants manufacture their own food is called _____.

- A. osmosis
- B. photosynthesis
- C. plasmolysis
- D. respiration

The correct answer is option [B]

2. _____, _____ and _____ are necessary for plant to make their own food.

- A. Sunlight, carbondioxide, chlorophyll
- B. Carbondioxide, oxygen, nitrogen
- C. Chlorophyll, nitrates, water
- D. Chlorophyll alone

The correct answer is option [A]

3. Living organisms that can manufacture their own food are referred to as _____.

- A. heterotrophs
- B. carnivores
- C. omnivores
- D. autotrophs

The correct answer is option (D)

4. The second set of teeth in mammals is called the ____ teeth.

- A. canine
- B. permanent
- C. milk
- D. molar

The correct answer is option [B]

5. ____ is the number and types of teeth present in a mammal and their arrangement in the lower and upper jawbones.

- A. Arrangement
- B. Dentition
- C. Incisors
- D. Dental formula

The correct answer is option [B]

Dentition is the number and kinds of teeth present in a mammal and their arrangement in the lower and upper jawbones.

6. An organism is said to be ____ when it feeds on dead plants and animals.

- A. autotrophic
- B. carnivorous
- C. parasitic
- D. saprophytic

The correct answer is option [D]

7. Chlorophyll which is contained in the chloroplast is present only in ____.

- A. green plants
- B. animals
- C. fungi
- D. yellow parts of plant

The correct answer is option (A)

8. The number of teeth that an animal has and their types is represented by a _____.

- A. dental structure
- B. dental composition
- C. dental formula
- D. dentition

The correct answer is option [C]

9. _____ test can be used to confirm that a plant takes up carbondioxide.

- A. Fehling
- B. Million's reagent
- C. Sugar
- D. Hydrogentrioxocarbonate (iv) indicator

The correct answer is option [A]

10. What is the dental formular for man?

- A. I-0/3 C-0/1 P-3/3 M-3/3
- B. I-3/3 C-1/1 P-3/2 M-1/1
- C. I-2/2 C-1/1 P-1/1
- D. I-2/2 C-1/1 P-2/2 M-3/3

The correct answer is option [D]

11. Which one of the following is NOT a source of carbohydrate?

- A. Cocoyam
- B. Corn
- C. Groundnut
- D. Millet

The correct answer is option [C]

12. The movement of gaseous particles between other particles is called ____.

- A. osmosis
- B. diffusion
- C. movement
- D. relocation

The correct answer is option [B]

13. The function of the teeth in our mouth is to ____.

- A. arrange food inside our mouth
- B. breakdown our food
- C. destroy the food we eat
- D. digest food

The correct answer is option [B]

14. To test for starch in a green leaf, the leaf is normally boiled to ____.

- A. isolate the starch
- B. kill the protoplasm
- C. kill the germs of the leaf
- D. kill the leaf

The correct answer is option [D]

15. ____ is the dentition of a cow.

- A. I- 0/3 M- 3/3
- B. I- 1/1 C- 0/1 P- 1/1 M- 3/3
- C. I- 3/3 C-3/1 P- 3/3
- D. I- 0/3 C- 0/1 P- 3/3 M- 3/3

The correct answer is option [D]

16. The gas that is most useful to plants for food production is _____.

- A. oxygen
- B. carbon (iv) oxide
- C. carbon monoxide
- D. water vapour

The correct answer is option [B]

17. The incisors and canine of man are used for _____ and _____.

- A. chewing, crushing
- B. crushing, sucking
- C. biting, cutting
- D. tearing, grinding

The correct answer is option [B]

18. The dentition of a cat is

- A. I- 3/2 C- 2/1 P- 3/2 M- 1/1
- B. I- 3/3 C- 1/1 P- 3/2
- C. I- 3/3 C- 1/1 P- 3/2 M- 1/1
- D. I- 3/1 P- 2/2 M- 1/2

The correct answer is option [C]

19. The process by which plants make starch is called _____.

- A. osmosis
- B. diffusion
- C. photosynthesis
- D. feeding

The correct answer is option [C]

20. A dog feeds on flesh and therefore, it is called a ____.

- A. carnivore
- B. herbivore
- C. omnivore
- D. scavenger

The correct answer is option [A]

TOPIC: MAN IN SPACE

DIRECTION: Choose the correct answer from the lettered options.

1. The first man to step on the moon is called _____.

- A. Neil Armstrong
- B. Thomas Edison
- C. Wilbur Wright
- D. Albert Einstein

The correct answer is option [A]

2. The speed of sound is highest in _____.

- A. water
- B. solids
- C. vacuum
- D. alcohol

The correct answer is option [B]

3. The moon moves round the earth due to the _____.

- A. spinning of the earth
- B. revolution of the earth
- C. moment of inertia
- D. gravitational force

The correct answer is option [B]

4. Why do fruits fall to the ground from a tree and do not rise upward?

- A. It is due to centrifugal force.
- B. It is due to the mechanical energy of the tree.
- C. It is due to gravitational force.
- D. It is due to weightlessness.

The correct answer is option [C]

5. The _____ of an object with the same amount of material varies when moved from place to place.

- A. mass
- B. weight
- C. colour
- D. width

The correct answer is option [B]

6. The sound in the sun is not heard on the earth because _____.

- A. sound does not travel in a vacuum
- B. the velocity of a sound wave is small
- C. a sound wave is completely absorbed by the atmosphere
- D. a sound wave is reflected back by the earth

The correct answer is option [A]

7. Which of the following people will experience weightlessness?

- A. A sick person
- B. An astronaut
- C. A doctor
- D. An engineer

The correct answer is option [B]

8. The amount of force with which gravity pulls an object depends on the following EXCEPT _____.

- A. the mass of the object
- B. the mass of the earth
- C. the distance between the center of the object and the earth
- D. the shape of the object

The correct answer is option [D]

9. One of the major problems faced by men who travel into space is _____.

- A. hunger
- B. lack of water
- C. loss of weight
- D. extreme cold

The Correct answer is option [C].

10. The _____ of an object containing the same amount of material remains constant when moved from place to place.

- A. mass
- B. weight
- C. gravitational pull
- D. centrifugal force

The correct answer is option [A]

11. Which of the following factors attract bodies to the centre of the earth?

- A. Electric force
- B. Force of gravity
- C. Magnetic force
- D. Force of attraction

The correct answer is option [B].

TOPIC: METALS AND NON-METALS

DIRECTION: Choose the correct answer from the lettered options.

1. When metals react with steam, the products are hydrogen and the oxide of the metal. This suggests that ____.

- A. water is an electrolyte
- B. water is a non-electrolyte
- C. water is composed of hydrogen and oxygen
- D. steam is very reactive when hot

The correct answer is option [C]

2. Which one of the following is a yellow metal that is an alloy of copper and zinc?

- A. Bronze
- B. Brass
- C. Solder
- D. Aluminum

The correct answer is option [B]

3. Brass is an alloy of ____ and ____.

- A. lead, tin
- B. copper, tin
- C. zinc, copper
- D. lead, copper

The correct answer is option [C]

4. The main impurity in the iron ore is _____.

- A. calcium oxide
- B. silicon (IV) oxide
- C. calcium trioxosilicate (IV)
- D. carbon (IV) oxide

The correct answer is option [B]

5. Which one of the following is NOT a property of metals?

- A. Brittle
- B. Ductile
- C. Conductor
- D. Lustrous

The correct answer is option [A]

6. _____ and _____ are metals that will react with steam, giving off hydrogen.

- A. iron, calcium
- B. sodium, iron
- C. potassium, magnesium
- D. magnesium, iron

The correct answer is option [C]

7. Which one of the following is NOT an oxide of metals?

- A. Acidic oxides
- B. Basic oxides
- C. Amphoteric oxides
- D. Peroxides

The correct answer is option [D]

8. Which of the following non-metallic elements is used in the manufacture of vulcanized rubber and explosives?

- A. Oxygen
- B. Sulphur
- C. Helium
- D. Phosphorus

The correct answer is option [B]

9. ____ and ____ are metals that react with steam to give off hydrogen.

- A. Iron, calcium
- B. Sodium, iron
- C. Potassium, magnesium
- D. Magnesium, iron

The correct answer is option [C]

10. Which of the following metals is the most reactive in the activity series?

- A. CA
- B. Cu
- C. K
- D. Mg

The correct answer is option [C]

11. A gas that would turn a solution of freshly prepared limewater milky is ____.

- A. ammonia
- B. carbon (iv) oxide
- C. hydrogen
- D. nitrogen

The correct answer is option [B]

12. An alloy is a mixture of _____.

- A. gases
- B. compounds
- C. metals
- D. all of the above

The correct answer is option [C]

13. What gas will be produced when diluted hydrochloric acid is reacted with granulated zinc?

- A. Carbon (iv) oxide
- B. Chlorine
- C. Hydrogen
- D. Nitrogen

The correct answer is option [C]

14. Which of these metals will NOT replace the hydrogen of water or dilute acids?

- A. Sodium
- B. Potassium
- C. Copper
- D. Magnesium

The correct answer is option [C]

15. Steel is an alloy of _____.

- A. calcium and tin
- B. carbon and iron
- C. carbon and lead
- D. iron and calcium

The correct answer is option [B]

16. A substance was examined and found to possess the following properties:

- (i) it does not conduct electricity and heat
- (ii) it is not ductile

The substance is most likely to be _____.

- A. an ion
- B. a metal
- C. a gas
- D. a non-metal

The correct answer is option [D]

17. If a metal can be drawn into wires relatively easily, it is called _____.

- A. malleable
- B. ductile
- C. extractive
- D. tactile

The correct answer is option [B]

18. The most important ore from which iron is commonly extracted is _____.

- A. haematite
- B. bauxite
- C. magnetite
- D. iron sulphate

The correct answer is option [C]

19. The arrangement of in their order of reactivity is called _____.

- A. metal series
- B. non - metal series
- C. activity series
- D. arrangement series

The correct answer is option [C]

20. Tin ore is a mineral mined at _____, Nigeria.

- A. Aladja
- B. Ibadan
- C. Jos
- D. Kaduna

The correct answer is option [C]

21. Metallic iron is coated with zinc in order to _____.

- A. give it a shiny appearance
- B. make it non-reactive
- C. prevent rusting
- D. make it denser

The correct answer is option [C]

22. Which of the following chemical substances is a metal?

- A. Iodine
- B. Nickel
- C. Carbon
- D. Phosphorus

The correct answer is option [B]

23. What is the name of the alloy made up to 50% tin and 50% lead?

- A. Brass
- B. Bronze
- C. Gold
- D. Solder

The correct answer is option [D].

24. Which of the following metals is the most electropositive?

- A. Calcium
- B. Copper
- C. Lead
- D. Silver

The correct answer is option [A]

25. Which of these metals cannot produce hydrogen gas when it reacts with dilute tetraoxosulphate (vi) acid?

- A. Sodium
- B. Silver
- C. Potassium
- D. Zinc

The correct answer is option [B]

26. Steel is an alloy consisting of iron and ____.

- A. tin
- B. copper
- C. gold
- D. carbon

The correct answer is option [D]

TOPIC: NERVOUS SYSTEM

DIRECTION: Choose the correct answer from the lettered options.

1. Which one of the following is NOT a reflex action?

- A. Sneezing
- B. Coughing
- C. Eye blinking
- D. Killing

The correct answer is option [D]

2. The is made up of ____ main parts.

- A. 2
- B. 3
- C. 4
- D. 5

The correct answer is option [B]

3. Which one of the following organs on the human body is used to detect taste?

- A. Eye
- B. Mouth
- C. Tongue
- D. Ear

The Correct answer is option [C]

4. Which part of the mammalian ear is responsible for balance in the body?

- A. Semicircular canal
- B. Cochlea
- C. Ear drum
- D. Eustachian tube

The correct answer is option [A]

5. Which of the following is an organ on the human body that is used to detect sound?

- A. Eye
- B. Mouth
- C. Tongue
- D. Ear

The Correct answer is option [D].

6. Which one of the following is an example of a reflex action?

- A. Eating
- B. Yawning
- C. Jerking
- D. Running

The correct answer is option [C]

7. The part of the eye that is sensitive to light is the _____.

- A. cornea
- B. iris
- C. retina
- D. pupil

The correct answer is option [C]

8. _____ is the cell or tissue which responds to stimulus.

- A. Effector
- B. Motor neurone
- C. Sensory neurone
- D. Receptor

The correct answer is option [A] The brain is the centre of the body. That part of the body (cell or organ) which receives the stimulus before passing it to the sensory neurone is called a Receptor. The cell or tissue which responds to the stimulus is the Effector

9. Which of the following eye defects can be corrected by using a diverging lens?

- A. Astigmatism
- B. Colour blindness
- C. Myopia
- D. Hypermyopia

The correct answer is option [C]

10. Which one of the following is NOT an eye defect?

- A. astigmatism
- B. colour blindness.
- C. hypermetropia
- D. pneumonia

The correct answer is option [D].

11. Blindness can be caused by _____ and _____.

- A. sleep, exercise
- B. balanced, unbalanced diet
- C. lack of sugar, water
- D. lack of vitamin A, poor diet

The correct answer is option [D]

12. The main parts of the are ____, ____ and ____.

- A. central nervous system, autonomic nervous system, peripheral
- B. central nervous system, heteronomic nervous system, peripheral
- C. central nervous system, heteronomy nervous system, autonomic
- D. central nervous system, hetero-peripheral nervous system, heteronomy
- E. peripheral nervous system, autonomic nervous system, heteronomy

The correct answer is option [A]

13. In normal vision, the image is formed exactly on the _____.

- A. retina
- B. optic nerve
- C. sclera
- D. choroid

The correct answer is option [A]

14. There are ____ main defects of the eye.

- A. 2
- B. 3
- C. 4
- D. 5

The correct answer is option [B]

15. Damage of the ____ can cause loss of sense of feeling and partial paralysis.

- A. spinal cord
- B. cerebrum
- C. cerebellum
- D. brain

The correct answer is option [A]

16. The response to the stimulus of a sharp object on the hand is to ____.

- A. endure the pain
- B. run away
- C. remove the hand quickly
- D. blink the eyes

The correct answer is option [C]

17. Response to reflex action comes from the ____.

- A. brain
- B. spinal cord
- C. peripheral nerves
- D. sense organs

The correct answer is option [B]

18. The organ used for detecting taste is called the ____.

- A. ear
- B. tongue
- C. nose
- D. mouth

The correct answer is option [B]

19. The central is part of the _____.

- A. sense organs
- B. brain
- C. spinal cord
- D. Nervous system

The correct answer is option [D]

20. A person who has difficulty in seeing objects that are near is said to be suffering from _____.

- A. astigmatism
- B. short sightedness
- C. long sightedness
- D. night blindness

The correct answer is option [B]

21. A reflex action is also known as _____ action.

- A. voluntary
- B. involuntary
- C. rough
- D. smooth

The correct option is option [B]

22. The _____ receives a stimulus before passing it to the sensory neurone.

- A. effector
- B. motor neurone
- C. association neurone
- D. receptor

The correct answer is option [D]

23. The way we feel after receiving and responding to a stimulus is called _____.

- A. effector
- B. motor neurone
- C. sensation
- D. receptor

The correct answer is option [C]

24. The nerve fibers that connect the eyes to the brain are called _____ nerves.

- A. light
- B. eye
- C. auditory
- D. optic

The correct answer is option [D]

25. To which of the following does the human eye respond?

- A. Odour
- B. Music
- C. Light
- D. Pressure

The Correct answer is option [C].

26. _____, _____ and _____ are the main defects of the eye.

- A. Hypermetropia, myopia, astigmatism
- B. Hypometropia, myopia, astigmatism
- C. Myopia, astigmatism, night blindness
- D. Hypermetropia, astigmatism, colour blindness

The correct answer is option [A]

27. The growth of plants towards water is called ____.

- A. phototropism
- B. geotropism
- C. tropism
- D. hydrotropism

The correct answer is option [D]

28. The stimulus that comes from the outside is received by a nerve called ____.

- A. receptor neuron
- B. motor neuron
- C. sensory neuron
- D. receptor

The correct answer is option [C]

29. What does the body do after receiving a stimulus?

- A. It responds
- B. It stimulates
- C. It grows
- D. It stays calm

The correct answer is option [A]

30. Anything that incites activity in any part of the body is called ____.

- A. growth
- B. stimulus
- C. action
- D. activity

The correct answer is option [B]

31. What organ of the body can be likened to a photographic instrument?

- A. Camera
- B. Eye
- C. Light detector
- D. Nose

The correct answer is option [B]

32. A reaction to a stimulus which CANNOT be controlled is referred to as a _____.

- A. sensation
- B. stimuli
- C. reflex action
- D. response

The correct answer is option [C]

33. The central is made up of _____ and brain.

- A. ganglion
- B. motor neuron
- C. spinal cord
- D. sensory neuron

The correct answer is option [C]

C

DIRECTION: Choose the correct answer from the lettered options.

1. Air can lead to _____.

- A. outbreak of diseases
- B. eradication of diseases
- C. a clean and healthy environment
- D. increase in the natural life of a place

The correct answer is option [A]

2. When oil spills in an environment, it will lead to the following EXCEPT _____.

- A. loss of farmlands
- B. water
- C. loss of fishing ponds
- D. flooding

The correct answer is option [D]

3. _____ is a compound, a common component of air but protects life in the upper atmosphere?

- A. Oxygen
- B. Hydrogen
- C. Ozone
- D. Carbon

The correct answer is option [C]

4. Gravitational field differs from magnetic field in that gravitational field _____.

- A. only attract objects while magnetic field attract and repel objects
- B. attracts and repels objects while magnetic field only attract objects
- C. only repel objects while magnetic field only attract objects
- D. none of the above

The correct answer is option [A]

5. Which one of the following is NOT an example of water pollutant?

- A. Acid rain
- B. Carbon (IV) oxide
- C. Oxygen
- D. Tetraoxophosphates

The correct answer is option [C]

6. Gas flaring leads to all the following EXCEPT _____.

- A. acid rain
- B. eclipse
- C. global warming
- D. air

The correct answer is option [B]

7. _____ can be described as the act of damaging pipelines to tap oil.

- A. Vandalization
- B. Bunkering
- C. Pollution
- D. Stealing

The correct answer is option [B]

8. One side effect of oil production in Nigeria is _____.

- A. poverty
- B. wealth
- C. water
- D. none of the above

The correct answer is option [C]

9. Which of the following will NOT pollute the air?

- A. Carbon monoxide
- B. Sulphur (IV) oxide
- C. High concentration of carbon dioxide
- D. Atmospheric oxygen

The correct answer is option [D]

10. Which of the following is a major pollutant of water?

- A. Agricultural fertilizer
- B. Water
- C. Sewage and dust particles
- D. Oil

The correct answer is option [C]

TOPIC: RESOURCES FROM LIVING THINGS

DIRECTION: Choose the correct answer from the lettered options.

1. The following are useful things animals can provide EXCEPT _____.

- A. wool and fur
- B. cotton
- C. ivory
- D. glue

The correct answer is option [B]

2. Which of these is NOT one of the four major types of plants?

- A. Food crops
- B. Fruit crops
- C. Cash crops
- D. Medicinal crops

The correct answer is option [B]

3. Which of the following is NOT a fruit?

- A. Orange
- B. Guava
- C. Mango
- D. Carrot

The Correct answer is option [D].

Carrot is a vegetable and not a fruit.

4. Which of the following is a cash crop in Nigeria?

- A. Beans
- B. Cocoa
- C. Corn
- D. Rice

The correct answer is option [B]

5. Paper is made from _____.

- A. softwood
- B. cotton
- C. hardwood
- D. hides

The correct answer is option [A]

6. Cash crops are crops produced mainly for _____.

- A. storage
- B. sale
- C. food
- D. entertainment

The correct answer is option [B]

7. The useful things that we get from living things can be called _____.

- A. resources
- B. cinfores
- C. materials
- D. food

The correct answer is Option [A]

8. Which of the following is NOT a root crop?

- A. Cashew
- B. Cassava
- C. Cocoyam
- D. Sweet potatoes

The correct answer is option [A]

9. Which of the following is NOT a way of preserving food crops?

- A. Salting
- B. Smoking
- C. Burning
- D. Processing

The correct answer is option [C]

10. Sacks and nets are produced from the following EXCEPT _____.

- A. jute
- B. sisal
- C. hides
- D. sorrel plant

The correct answer is option [C]

11. Hides and skin provide man with the following products EXCEPT _____.

- A. bags
- B. garments
- C. dyes
- D. shoes

The correct answer is option [C]

TOPIC: WEATHER

DIRECTION: Choose the correct answer from the lettered options.

1. _____ is the scientific study of the atmosphere and the changes that take place in the weather.

- A. Thermometer
- B. Barometer
- C. Spectrometer
- D. Meteorology

The correct answer is option [D]

2. The instrument used in obtaining the direction of wind is _____.

- A. thermometer
- B. wind vane
- C. wind - voltammeter
- D. mercury barometer

The correct answer is option [B]

3. To determine wind speed at stations, we use _____.

- A. a barometer
- B. an ammeter
- C. a meteorology
- D. an anemometer

The correct answer is option [D]

4. Air pressure is measured with ____.

- A. a thermoter
- B. an air - gauge
- C. a voltameter
- D. a barometer

The correct answer is option [D]

5. Which one of the following instruments is used for measuring air pressure?

- A. Barometer
- B. Hygrometer
- C. Photometer
- D. Thermometer

The correct answer is option [A]

6. The process of breaking down of the earth's surface is called ____.

- A. erosion
- B. hurricane Catherina
- C. weathering
- D. earth break

The correct answer is option [C]

7. ____ is an instrument used to measure the amount of rainfall recorded in a given place and at a given period of time.

- A. Barometer
- B. Hydrometer
- C. Wind vane
- D. A Rainguage

The correct answer is option [D]

8. The type of instrument normally used to measure the amount of water vapour in the air is called ____.

- A. barometer
- B. waltmeter
- C. wet and dry bulb thermometer
- D. rain - gauge

The correct answer is option [C]

9. Which of the following is the term given to the amount of water vapor in the air?

- A. Climate
- B. Vaporization
- C. Humidity
- D. Water volume

The correct answer is option [C]

10. What is the name of the scientific study of the atmosphere and the changes that take place in weather?

- A. Meteorology
- B. Weatherology
- C. Humidology
- D. Weathering

The correct answer is option [A]

11. Which of the following does NOT affect weather?

- A. Rainfall
- B. Sunshine
- C. Autumn
- D. Wind

The correct answer is option [C]

12. Wind is caused by _____ .

- A. the appearance of sun
- B. cloud cover
- C. cloud formation
- D. difference in air pressure

The correct answer is option [D]

13. The lines drawn on a map that joins places of equal temperature are called _____.

- A. isotherms
- B. isobars
- C. isonets
- D. contours

The Correct answer is option [A].

14. The lines on a map which joins places of equal air pressures are called _____.

- A. isotherms
- B. isobars
- C. isohytes
- D. contours

The Correct answer is option [B].

15. Wet and dry bulb thermometer is also known as _____.

- A. waltmeter
- B. witmeter
- C. thermometer
- D. psychrometer

The correct answer is option [D]

16. Which of the following falls to the earth as rain?

- A. Moon
- B. Sun
- C. Cloud
- D. Liquid precipitation

The Correct answer is option [D].

17. ____ is the ratio of the amount of moisture in the air compared with the amount of moisture the air could hold if it is completely saturated.

- A. Relative humidity
- B. Atmospheric pressure
- C. Relative rainfall
- D. Relative sunshine

The correct answer is option [A]

18. Which of the following does a meteorologist most likely observe?

- A. Atmospheric pressure
- B. Climate
- C. Precipitation
- D. Condensation

The correct answer is option [B]

19. The science of weight and measures is called ____.

- A. metrology
- B. meteorology
- C. mineralogy
- D. morphology

The correct answer is option [A]

20. The state or condition of the atmosphere at a given point in time is called _____.

- A. atmosphere
- B. cloud
- C. Weather
- D. humidity

The correct answer is option [C]

21. A wind vane is used to measure _____.

- A. wind direction
- B. wind power
- C. wind volume
- D. wind speed

The correct answer is option [A]

22. change is affected by ____.

- A. rainfall
- B. atmospheric temperature
- C. sunshine
- D. all of the above

The correct answer is option [D]

TOPIC: WORK AND ENERGY

DIRECTION: Choose the correct answer from the lettered options.

1. Which one of these is NOT an agricultural tool?

- A. Shovel
- B. Cutlass
- C. Hoe
- D. Saw

The correct answer is option [D]

2. If the mechanical advantage of a machine is 0.4, what is the load on it when an effort of 160N is applied?

- A. 640N
- B. 400N
- C. 64N
- D. 40N

The correct answer is option [C].

$$\text{MA} = \text{load/effort}$$

$$\text{load} = \text{MA} \times \text{effort}$$

$$\text{load} = 0.4 \times 160$$

$$\text{load} = 64\text{N}$$

3. The ratio of load over effort is the _____ of a machine.

- A. efficiency
- B. work done
- C. mechanical advantage
- D. work output

The correct answer is option [C]

4. Why is the efficiency of a machine always less than 100 percent?

- A. Friction
- B. Force ratio
- C. Velocity ratio
- D. Mechanical advantage

The correct answer is option [A]

5. The unit of work done is calculated in _____.

- A. centimeter
- B. gramme
- C. joule
- D. meter

The correct answer is option [C]

6. Energy due to motion is called _____ energy.

- A. kinetic
- B. mechanical
- C. potential
- D. motion

The correct answer is option [A]

7. What is the kinetic energy in joules of a body of mass 6.5kg moving with a velocity of 8ms^{-1} ?

- A. 26
- B. 52
- C. 104
- D. 208

The correct answer is option [D].

$$ke = \frac{1}{2}mv^2$$

$$ke = \frac{1}{2} \times 6.5 \times 82$$

$$ke = 208$$

8. What is efficiency?

- A. It is the ratio of the work input to the work output of a machine.
- B. It is the ratio of the work output to the work input of a machine.
- C. It is the product of the work output to the work input of a machine.
- D. It is the sum of the work output to the work input of a machine.

The correct answer is option [B]

9. Which of the following is a form of energy?

- A. Potential energy
- B. Kinetic energy
- C. Mechanical energy
- D. All of the above

The correct answer is option [D]

10. What is the work done when a force of 15N moves a distance of 5m?

- A. 3J
- B. 10J
- C. 20J
- D. 75J

The correct answer is option [D]

work done = mass x distance

$$\text{work done} = 15 \times 5$$

$$\text{work done} = 75\text{J}$$

11. Energy stored is called ____ energy.

- A. kinetic
- B. mechanical
- C. potential
- D. biological

The correct answer is option [C]

TOPIC: WRITING CHEMICAL EQUATION

DIRECTION: Choose the correct answer from the lettered options.

1. When people hang their clothes out to dry, what happens during the process of drying?

- A. Evaporation
- B. Melting
- C. Condensation
- D. Sublimation

The correct answer is option [A]

2. The Latin name for Potassium is _____.

- A. ferrum
- B. natrium
- C. cuprum
- D. kalium

The correct answer is option [D]

3. Whenever a substance undergoes a chemical change, a chemical reaction takes place.

- A. True
- B. False

The correct answer is option [A]

4. Which of the following is the symbol for nitrogen?

- A. Ne
- B. N
- C. Na
- D. Mn

The correct answer is option [B]

5. Co is the symbol for _____.

- A. Chlorine
- B. Copper
- C. Calcium
- D. Cobalt

The correct answer is option [D]

6. _____ is the symbol for the element fluorine.

- A. Fe
- B. Fn
- C. Fo
- D. F

The correct answer is option [D]

7. A molecule of calcium trioxocarbonate (IV) contains _____ atoms.

- A. 5
- B. 4
- C. 3
- D. 2

The correct answer is option [A]

8. The reaction of Magnesium + Water \rightarrow Magnesium Oxide + Hydrogen takes place only in the presence of _____.

- A. excess magnesium ribbon
- B. excess cold water
- C. steam
- D. very hot water

The correct answer is option [C]

9. Which of the following is the symbol for phosphorus?

- A. Pb
- B. Pt
- C. K
- D. P

The correct answer is option [D]

10. In ____ elements, the symbols are the first letter of the name of the element.

- A. group A
- B. group B1
- C. group B2
- D. group C

The correct answer is option [A]

11. The element oxygen, belongs to group ____.

- A. A
- B. B1
- C. B2
- D. C

The correct answer is option [A]

12. Cation is referred to as ion that is ____ charged.

- A. negatively
- B. neutral
- C. positively
- D. naturally

The correct answer is option [C]

13. An atom which carries a charge is called _____.

- A. ion
- B. atomic charge
- C. net charge
- D. iron

The correct answer is option [A]

14. K is the symbol for _____ element.

- A. sodium
- B. mercury
- C. potassium
- D. calcium

The correct answer is option [C]

15. The loss or gain of an electron by an atom produces _____.

- A. a compound
- B. an element
- C. an ion
- D. a molecule

The correct answer is option [C]

16. Which of the following shows a balanced equation for the neutralization reaction of sodium hydroxide and tetraoxosulphate (V)?

- A. $\text{NaOH} + \text{H}_2\text{SO}_3 \rightarrow \text{NaSO}_3 + 2\text{H}_2\text{O}$
- B. $2\text{NaOH} + \text{H}_2\text{SO}_3 \rightarrow \text{Na}_2\text{SO}_4 + 2\text{H}_2\text{O}$
- C. $\text{NaOH} + \text{H}_2\text{SO}_4 \rightarrow \text{NaSO}_4 + \text{NaSO}_4 + \text{H}_2\text{O}$
- D. $\text{NaOH} + 2\text{H}_2\text{SO}_4 \rightarrow \text{Na}_2\text{SO}_4 + \text{H}_2\text{O}$

The correct answer is option [B]

17. Which of the following statements about elements is INCORRECT? .

- A. An element consists of only one kind of matter.
- B. An element cannot be separated into more than one type of substance.
- C. Elements are substances that can be broken down into anything else.
- D. When elements are mixed together without any chemical reaction, a mixture is obtained.
- E. The element gold contains no other substance except gold.

The correct answer is option [C]

18. Which of the following is the symbol for sodium?

- A. Fe
- B. Na
- C. Hg
- D. Pb

The correct answer is option [B]

19. The symbol for Helium is _____.

- A. HE
- B. hE
- C. He
- D. he

The correct answer is option [C]

20. Li is a group ____ element.

- A. A
- B. B1
- C. B2
- D. C

The correct answer is option [B]

21. The chemical formula for Iron (iii) oxide is _____.

- A. FeO
- B. Fe₂O
- C. Fe₂O₃
- D. Fe₃O₂

The correct answer is option [C]

22. What is the chemical name for common salt?

- A. Potassium Chloride
- B. Calcium Chloride
- C. Sodium Chloride
- D. Ammonium Chloride

The Correct answer is option [C].

23. The Latin name of elements is used to derive the symbol of _____.

- A. Group A
- B. Group B1
- C. Group B2
- D. Group C

The correct answer is Option [D]

24. _____ is a substance which contains two or more elements chemically combined.

- A. An atom
- B. An element
- C. A compound
- D. A yard

The correct answer is option [C]

25. Which one of the following is NOT a group B1 element?

- A. Neon
- B. Platinum
- C. Calcium
- D. Cobalt

The correct answer is option [B]

26. C is the symbol for _____ element.

- A. calcium
- B. chlorine
- C. carbon
- D. copper

The correct answer is option [C]

27. Anion is referred to as the ion that is _____ charged.

- A. negatively
- B. positively
- C. neutrally
- D. lessly

The correct answer is option [A]

28. Which of the following is the symbol for hydrogen?

- A. He
- B. H
- C. Hg
- D. Ag

The correct answer is option [B]

29. The chemical formula of calcium trioxocarbonate (iv) is _____.

- A. CaCO_3
- B. CaCO_2
- C. CaSO_4
- D. $\text{Ca}(\text{Na}_3)_2$

The correct answer is option [A]

30. Iodine is a group A element.

- A. True
- B. False

The correct answer is option [A]

31. Given $\text{H}=1$, $\text{S}=32$, $\text{O}=16$, which of the following statements is correct concerning tetraoxosulphate (vi) acid with the formula H_2SO_4 ?

- A. It has a relative molecular mass of 98g.
- B. It has a gram formula of 49g.
- C. It has a molecular mass of 98g/mol.
- D. It has a gram formula of 98.

The correct answer is option [A]

32. Which one of the following is the definition for a chemical formula?

- A. It is a substance which consists of only one kind of matter.
- B. it is a substance which contains two or more elements chemically combined.
- C. It is a representation of substances using symbols.
- D. It is a means of keeping an object free of germs or micro-organisms.

The correct answer is option [C]

33. Which group does the element with the symbol S belong to?

- A. A.
- B. B1
- C. B2
- D. C

The correct answer is option [A]

34. Which group derives their symbol from the first letter and another letter in the name of the element?

- A. Group A
- B. Group B1
- C. Group B2
- D. Group C

The correct answer is option [C]

35. How many states of matter do we have?

- A. 1
- B. 2
- C. 3
- D. 4

The correct answer is option [C]

36. Which one of these is NOT a Group B1 element?

- A. Mn
- B. Br
- C. Ba
- D. Be

The correct answer is option [A]

37. _____ is the symbol for Beryllium.

- A. Be
- B. Ba
- C. Br
- D. B

The correct answer is option [A]

38. What is the Latin name for Lead?

- A. Natrium
- B. Ferrum
- C. Plumbum
- D. Kalium

The correct answer is option [C]

39. What is the symbol used for Sodium?

- A. So
- B. Na
- C. Sm
- D. K

The correct answer is option [B].

40. Which of the following equations is NOT balanced?

- A. $\text{NaOH(aq)} + \text{HCl(aq)} \rightarrow \text{NaCl(aq)} + \text{H}_2\text{O(l)}$
- B. $\text{CuO(s)} + \text{H}_2\text{SO}_4\text{(aq)} \rightarrow \text{CuSO}_4\text{(aq)} + \text{H}_2\text{O (l)}$
- C. $\text{Zn(s)} + \text{H}_2\text{SO}_4\text{(aq)} \rightarrow \text{ZnSO}_4\text{(aq)} + \text{H}_2\text{(g)}$
- D. $\text{C(s)} + \text{O}_2\text{(g)} \rightarrow \text{CO(g)}$

The correct answer is option [D]

41. A substance which contains two or more elements chemically combined is called _____.

- A. atom
- B. element
- C. compound
- D. equation

The correct answer is option [C]

42. Br is the symbol for _____.

- A. barium
- B. bromine
- C. boron
- D. beryllium

The correct answer is option [B]