NUMBER OF QUESTIONS: 60 **TIME ALLOWED: 1:00 hour**

GENERAL DIRECTIONS

THIS MODEL EXAMINATION CONTAINS 60 MULTIPLE-CHOICE GENERAL SCIENCE QUESTIONS.

THERE IS ONLY ONE BEST ANSWER FOR EACH QUESTION. CHOOSE THE CORRECT ANSWER FROM THE SUGGESTED OPTIONS AND BLACKEN THE LETTER OF YOUR CHOICE ON THE ANSWER SHEET. USE ONLY PENCIL TO MARK YOUR ANSWERS. YOUR ANSWER MARKS SHOULD BE HEAVY AND DARK, COVERING THE ANSWER SPACE COMPLETELY. PLEASE ERASE ALL UNNECESSARY MARKS COMPLETELY INCLUDING ANSWERS YOU HAVE CHANGED FROM YOUR ANSWER SHEET.

YOU ARE ALLOWED TO WORK ON THE EXAM FOR 1HOUR. WHEN TIME IS CALLED, YOU MUST IMMEDIATELY STOP WORKING, PUT YOUR PENCIL DOWN, AND WAIT FOR FURTHER INSTRUCTIONS.

ANY FORM OF CHEATING OR AN ATTEMPT TO CHEAT IN THE EXAMINATION WILL RESULT IN AN AUTOMATIC DISMISSAL FROM THE EXAMINATION HALL AND CANCELLATION OF YOUR SCORE(S).

PLEASE MAKE SURE THAT YOU HAVE WRITTEN ALL THE REQUIRED INFORMATION ON THE ANSWER SHEET BEFORE YOU START TO WORK ON THE EXAMINATION.

DO NOT TURN THIS PAGE OVER UNTIL YOU ARE TOLD TO DO SO.

1. _____is process by which indigenous people build their empirical knowledge of their natural environment.
   A. Indigenous science C. Natural science
   B. Conventional science D. Social science
2. Among the following which one is branch of science?
   A. Anatomy C. Biology
   B. Biochemistry D. Zoology
3. Who discovered the laws of motion and law of gravity?
   A. Michael Faraday C. Isaac Newton
   B. Marie Curie D.Albert Einstein
4. Which of the following laboratory tools used to measure temperature?
   A. Tong C. beaker
   B. Test tube D. Thermometer
5. The study of composition of matter is the concern of
   A. Chemistry C. Physics
   B. Biology D. Geology
6. Of the following which one is matter?
   A. Light C. heat
   B. Air D. energy
7. Highly and easily compressible property best describe the substance in
   A. Liquid state C. gas state
   B. Solid state D. None
8. The process in which a solid substance changes into a liquid on heating is
   A. Melting C. Condensation
   B. Boiling D. Sublimation
9. Which one of the is an example of pure substance
   A. air C. Honey
   B. Milk D. Water
10. A physical combination of substances can form
    A. Mixture C. element
    B. Compound D. Chemical change

11. --------- is double membrane organelles and serve as site of photosynthesis
    A. Chloroplast C. cell membrane
    B. Body Golgi D. vacuole
12. ----------is the ability of a substance to conduct electricity.
    A. Electrical conductivity C. density
    B. Electrolysis D. durability

13. Which symbol of element derived from Latin names?
    A. Lithium C. carbon
    B. Gold D. oxygen
14. In the following unbalanced chemical equation, $Al + O_2 _ Al_2O_3$, when it is correctly balanced, what is the coefficient of Al?
    A. 3 C. 1
    B. 4 D. 2
15. Ability of microscope to show the detailed part of an object is
    A. Power C. resolution
    B. Magnification D. Simplification
16. From parts of compound microscope which one is carry the microscope?
    A. Objective lens C. diaphragm
    B. Stages D. arm
17. Which one is known as a basic unit of life?
    A. Cell C. organ
    B. Tissue D. organism
18. Which organelle controls all activities of the cell and it store genetic information?
    A. Cell membrane C. cell wall
    B. Nucleus D. cytoplasm
19. Which cell is **NOT** common to animal and plant?
    A. Vacuoles C. plastid
    B. Nucleus D. Mitochondria
20. ---------- Organisms are those organisms composed of one cell.
    A. Multicellular C. null cellular
    B. Semi-cellular D. unicellular
21. The Collections of tissues grouped together based on a common function is
    A. Cell C. organ
    B. Tissue D. organism
22. The biological process in which glucose is converted into energy in the presence of oxygen is
    A. Fermentation C. Anaerobic Respiration
    B. Aerobic respiration D. respiration
23. The scientific name of human race is
    A. Homo sapiens C. home habiles
    B. Home eructs D. home babiles
24. The lowest layer of Earth's atmosphere is
    A. Exosphere C. thermosphere
    B. Troposphere D. Stratosphere

25. The Motion of a car around a circular path is classified under which type of motion?
    A. Rectilinear Motion C. Curvilinear Motion
    B. Oscillatory Motion D. Rotary Motion
26. Which one of the following is derived unit measurement?
    A. Kelvin C. Square meter
    B. Meter D. Second
27. the mass of a block of metal is 10Mg this mass is equal to:
    A. 100kg C. 10kg
    B. 1000kg D. 10000kg
28. While looking for the solution to a problem ,a student observe the problem and then he begins the investigation process with:
    A. Drawing conclusion C. Communicate the result
    B. Testing the problem D. Developing hypothesis
29. The actual mass of the block of zinc is 7kg. a student measured the mass of zinc three times and got 4.72kg, 4.73kg and 4.7kg this measurement is :
    A. Both accurate and precise C. Precise but not accurate
    B. Accurate but not precise D. Neither accurate nor precise
30. Which one of the following scientific method comes after the other?
    A. Communicating the result C. Developing observation
    B. Do back ground research D. Developing hypothesis
31. Which one of the following is NOT a basic quantity?
    A. Volume C. Mass
    B. Time D. Temperature
32. Which one of the following is NOT the indigenous method of mass?
    A. Cubit C. Feresulla
    B. Weqet D.Quntal
33. 0.00002m is equal to:
    A. 2μm C. 20mm
    B. 20μm D. 200mm
34. Which one of the following is NOT unit of density?
    A. Kg/m^3 C. g/m^3
    B. g/cm^3 D. kg/m^2
35. Which of the following is correct about continuous theory of matter?
    A. It was proposed by Democritus C. Believe the idea of atom
    B. Matter is infinitely divisible D. A division has limit
36. The net charge of neutral atom is:
    A. +1 C. 0
    B. -1 D. +2
37. The relative charge of proton ,neutron , and electron are respectively:
    A. 1, 1,0 C. 1, 1, -1
    B. 0, 1, -1 D. 1, 0, -1

38. Which one of the following is **Not** effect of force?
    A. Start to move stationary body
    B. Increase speed of moving body
    C. Decrease speed of moving body
    D. Push objects towards gravity
39. Which one of the following is measurable physical quantity?
    A. Color
    B. Odor
    C. Density
    D. Taste
40. Which of the following is extensive physical property?
    A. Hardness
    B. Density
    C. Melting point
    D. Volume
41. Almost mass of an atom is mass of.
    A. Proton
    B. . Neutron
    C. Electron
    D. Nucleus
42. Which one of the following is mono atomic molecule?
    A. Ar
    B. N_2
    C. Na
    D. O_3

43. Which type of compound is obtained from non-living things (minerals)?

    A. Organic compound only
    B. In organic compound
    C. Both organic and inorganic compound
    D. Neither organic nor Inorganic compound

44. Which one of the following is the chemical formula of alkyne 18 by hydrogen atom?

    A. C_9H_{18}
    B. $C_{10}H_{18}$
    C. C_8H_{18}
    D. $C_{10}H_{20}$

45. The name of the compound with chemical formula of C_6H_{12}?

    A. heptene
    B. hexane
    C. Hexyne
    D. hexene

46. Identify a property that correctly describes acids. Acids react with:

    A. Acid to form salt
    B. Salt to form base
    C. Water to form base
    D. Base to form salt

47. The characteristic property of a base is due to the presence of :

    A. Oxide ion
    B. Hydrogen ion
    C. Hydroxide ion
    D. Hydride ion

48. Which one of the following is used in hospitals and clinics for cleaning wounds?

A. formalin C. Ethyne

B. Ethanol D. propane

49. Which of the following pairs compounds produce sodium phosphate?

A. sodium hydroxide and phosphoric acid C. sodium oxide and water

B. sodium hydroxide and sulfuric acid D. sodium oxide and phosphors

50. Which the following is **Not** property of bases? They

A. change phenolpalein indicator to pink C. has bitter taste

B. change methyl orange indicator to red D. change red litmus paper to blue

51. The reaction of acid with magnesium is given by the equation $H_2SO_4 + Mg \longrightarrow X + H_2$ .Which of the following represent X?

A. $MgSO_4$ C. $Mg(HSO_4)_2$

B. $MgSO_3$ D). MgS

52. Which of the following chemical formula represents ammonium sulphate?

A. $(NH_4)_2SO_4$ C. $(NH_4)_2S$

B. NH_4SO_4 D. $(NH_4)_2PO_4$

53. Which one of the following react with water to form base?

A. K_2CO_3 C.Na_2O

B. CO_2 D. SO_3

54. Which one of the following homologous series of alkene?

A. C_2H_4 , C_3H_6 , C_4H_{10} C. C_4H_8 , C_5H_{10} , C_6H_{12}

B. C_3H_6 , C_3H_8 , C_3H_4 D. C_2H_2 , C_2H_4 , C_2H_6

55. Which of the following salt is used to make gun powder?

A. Sodium bicarbonate C. Sodium chloride

B. Potassium Nitrate D. Calcium Carbonate

56. Which of the following is not oxide?

A. H_2O C. NO^-_3

B. Na_2O D. Al_2O_3

57. Which of the following component of integumentary system secret important substance?

A. Glands C. Hair

B. Skin D. Nail

58. What is the chemical formula of phosphoric acid?

A. H_2PO_4 C.HPO_4

B. H_3PO_4 D.H_2PO_3

59. The best method to separate a mixture of table salt and sand is:

A. Filtration→ distillation → evaporation C. Dissolution→ filtration→ evaporation

B. evaporation→ Decatation→ fultration D. filtration→ decantation→ evaporation

60. The symbolic representation of Tungsten:

A. Ta C. Tu

B. Sn D. W