KOLFE KERANIO SUB CITY EDUCATION OFFICE

GENERAL SCIENCE MODEL EXAMINATION FOR GRADE EIGHT (8TH) 2016 E.C

April 2016 E.C/2024 G.C

NUMBER OF QUESTIONS: 60 TIME ALLOWED:- 1 HOUR GENERAL DIRECTIONS

THIS BOOKLET CONTAINS **GENERAL SCIENCE** EXAMINATION. IN THIS EXAMINATION, THERE ARE A TOTAL OF **60 MULTIPLE CHOICE QUESTIONS**. CAREFULLY SELECT THE BEST ANSWER AND **BLACKEN** ONLY THE LETTER OF YOUR CHOICE ON THE SEPARATE ANSWER SHEET PROVIDED. FOLLOW THE INSTRUCTIONS ON THE ANSWER SHEET AND THE EXAMINATION PAPER CAREFULLY. USE ONLY **PENCIL** TO MARK YOUR ANSWERS. YOUR ANSWER MARK SHOULD BE **HEAVY** AND **DARK**, COVERING THE ANSWER SPACE COMPLETELY. PLEASE ERASE ALL UNNECESSARY MARKS COMPLETELY FROM YOUR ANSWER SHEET.

YOU ARE ALLOWED TO WORK ON THE EXAM FOR **1 HOUR**. 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 UNTIL YOU ARE TOLD TO DO SO.

DIRECTION ONE: **CHOOSE THE CORRECT ANSWER FROM THE GIVEN FOUR ALTERNATIVES AND BLACKEN THE LETTER OF YOUR CHOICE ON THE ANSWER SHEET PROVIDED.**

1. Which one of the following is fundamental physical quantity?
   A. Area. B. Mass C. Volume D. Speed.
2. Which of the following sets contains only derived physical quantities?
   A. mass, Time and length B. mass, area and volume
   C. Time, length and density D. volume, density and area
3. 35 meter is equal to: _____.
   A .3.5 cm B. 0.035 mm C. 350 mm D .3500 cm
4. Which of the following sets of prefixes is decreasing in order?
   A. micro, kilo, centi, milli B. milli, mega, centi, kilo
   C. Mega, kilo, centi, milli D. mega, milli, centi, kilo
5. Which one of the following is not true about scientific method/investigation?
   A. A scientific investigation typically begins with observations.
   B. A hypothesis is a tentative explanation for a set of observations.
   C. The hypothesis must be tested by conducting an experiment.
   D. Formulating hypothesis is the last steps of in scientific investigation.
6. Which of the following represent a tentative explanation of a certain scientific law?
   A. Experiment B. Hypothesis C. Observation D. Theory
7. Suppose you measure the actual mass of the **15kg** coffee four times and you get **11.5kg, 11.45kg**, **11.39kg and 11.42kg**.which one of the following is true about measurement?
   A. Accurate and precise B. Accurate but not precise
   C. Neither precise nor accurate D. Precise but not accurate
8. In neutral atom, what is the atomic number of an atom that has 15 electron and 16 neutrons?
   A. 31 B.18 C. 16 D.15
9. Which of the following is the lightest sub atomic particle?
   A. Electron B. Ion C. Neutron D. Proton
10. Which one of the following is a diatomic molecule of the elements?
    A .Ne B.O_3 C. Cl_2 D. Ar
11. Which one of the following molecules contains more than three atoms of an element?
    A. Monoatomic molecules C. Polyatomic molecules
    B. Diatomic molecules D. Both monoatomic & diatomic molecules
12. Which of the following contains primarily carbon and hydrogen atoms, with other possible elements " Except "the oxide of carbon, carbonate and hydrogen carbonates?
    A. Ammonium cyanate B. In organic compounds
    C. Organic compounds D. Oxides
13. Which one of the following is the formula of an alkyne with five carbon atom?
    A. C_5H_8 B. C_5H_{10} C. C_8H_{12} D. C_5H_5
14. Which one of the following are the main sources of hydrocarbons?
    A. Crude oil B. Petroleum C. Natural gas D. All

15.Which one of the following is an examples of acidic oxides?

A .Na_2O B . CaO C . SO_2 D. MgO

16. Which of the following IS NOT TRUE about the properties of bases?

A. Bases have bitter taste.

B. Bases change the litmus paper from red to blue.

C. Bases neutralize acids.

D. Bases change methyl orange indicator from yellow to red.

17. In an experiment a girl accidently drink strong acid, what should be taken to neutralize the acid.

A. H_2SO_4 B. HNO_3 C. Mg $(OH)_2$ D. Na_2SO_4

18. Which of the following formula represent sulfuric acid?

A. H_2NO_3 B. H_2PO_4 C. H_2SO_4 D. HCl

19.Which one of the following neutralization reaction can be done in our everyday life?

A. Using acidic soil to treat powered lime.

B. Using antiacids like to neutralize excess acids in the stomach.

C. Using baking powder which is use to cure bee stings and ant bites.

D. Using tooth paste to protect our teeth from bacteria.

20. Which one of the following is not the component of axial skeleton?

A. Hyoid B. Vertebral column C. Shoulder bone D. Skull

21.Which function performed by integumentary systems?

A. Digestion & respiration C. reproduction & respiration

B. Protection & execration D. breathing & digestion

22.Which of the following muscle disease is a group of inherited disease characterized by weakness and wasting away of muscle tissue with or without the breakdown of nerve tissue

A. Muscle elasticity B. Muscle dystrophy C .Muscle strains D. Muscle contractility

23. The mineralized connective tissue that contains collagen and other minerals like calcium phosphate and mineral crystal is:

A. Cartilage B. Ligaments C. Bones D. Joints

24.In which one of the following digestive systems the food digestion starts?

A.Mouth B.Stomach C.Small intestine D.Anus

25.Which one of the following disease of digestive system that causes inflammation, irritation or erosion of the lining of the stomach?

A.Diarrhea B.Gastritis C.Hemorrhoids D.constipations

26. Which of the following is the correct order of respiratory system?

A. Nose➔ pharynx ➔ larynx➔brochi➔ bronchioles ➔ alveoli

B. Nose➔ pharynx➔ larynx➔ trachea➔ bronchioles➔brochi➔ alveoli

C. Nose➔ bronchioles➔brochi➔larynx➔ pharynx➔ trachea➔ alveoli

D. Nose➔ pharynx➔larynx➔ trachea➔bronchi➔bronchioles➔alveoli

27. Your finger, blood comes out and then stops flowing, this is due to clotting of blood by:

A. red blood cells B. platelets

C. white blood cells D. leucocytes

28.The narrow tube from the ovary to uterus for movement of an egg and the site Fertilization is:

A.Vagina B. Oviduct C. Cervix D. Womb

29. Which one of the following **IS NOT** the component of blood circulatory system?

A. The heart C. The blood
B. The blood vessel D. The lungs

30.Which of the following is a component of human circulatory system?
A. Trachea B. Liver C. Heart D. Mouth

31. When puberty place in boys, which one of the following does not happen?
A. Penis enlarges. C. Voice becomes thinner
B. Shoulders and chest broaden. D. Growth of pubic and facial hairs.

Item number 32, 33, and 34 are based on the following food chain.

Grass ⟶ Frog ⟶ Snake ⟶ Hawk

32. What would be the producer in the above food chain?
A. Snake B. Grass C. Hawk D. Frog

33. What would be the tertiary consumer in the above food chain?
A. Frog B. Grass C. Hawk D. Snake

34. What would be the first and second trophic level in the above food chain respectively?
A. Frog and Snake B. Frog and Grass C. Snake and Hawk D. Grass and Frog

35. Which of the following is biotic component of the ecosystem?
A. Temperature B. Soil C. microorganism D. water

36. Which of the following is correct about food chain?

A. Show transfer of food from carnivores to producers
B. Begins with an organisms that makes its own food
C. Begins with an organism that found in the last trophic level
D. It is a complex feeding relationship.

37. Which of the following types of soil is suitable for large number of plants?
A. Clay B. Sandy C. Loam D. low fertile soil

38. Which of the following biological association is **not** correctly paired with its example?

A. Parasitism--Tapeworm and Human C. Mutualism---big tree and epiphytes

B. Predation--cat and Rat D. Protocooperation -- Birds and crocodile

39. Which of the following types of soil has highest Water holding capacity?
A. Sandy B. Clay C. Loam D. Silt

40. Which of the following is the most abundant and pure component of the air?
A. Argon B. Oxygen C. Carbon dioxide D. Nitrogen

41. Which of the following is not important method for water conservation?
A. entering industrial waste to water B. contour ploughing
C. cover vegetation D. terracing

42. Worldwide Blockage or reduction of sun light from the reaching the earth surface is known as
A. acid rain B. global warming C. global dimming D. none

43. Which of the following gas is result in global warming when accumulated in atmosphere?
A. hydrogen B. water vapour C. oxygen D. carbon dioxide

44. Which one of the following is an example of In-situ conservation of bio-diversity?
A. seed bank B. aquarium
C. national park D. botanical garden

45. The path where planets revolve around the Sun is known as
A. Solar system B. Orbit C. Circle D. Road

46. Which planet is known as the red planet, because of its reddish color?
A. Mars B. Jupiter C. Saturn D. Uranus

47. Which one of the following is **not** correct about the inner planets?
A. They have low mass C. They have high average densities
B. They are made of rock D. They have large number of moons.

48. A celestial body that revolves around a planet is known as
A. Planet B. Asteroid C. comet D. Satellite

49. The farthest planet in the solar system is
A. Neptune B. Uranus C. Saturn D. Venus

50. Which planet rotates fastest around its axis of rotation?
A. Mercury B. Earth C. Venus D. Jupiter

51. Which of the following planet is the only planet that support life?
A. Mars B. Saturn C. Earth D. Jupiter

52 .Which of the following is **not** the cause of suitability of life on earth?
A. The existence of global warming B. The existence of ozone layer
C. The existence of the right sun D. The existence of the right amount of liquid water

53. Which one of the following is natural sources of light?
A. burning wood B. stars C. candle D. electric bulb

54. Which one of the following is **not** the nature of image formed by plane mirror?
A. Real B. Erect C. Virtual D. the same size as the object

55. Sound is produced by __
A. non vibrating objects only B. vibrating objects only
C. vibration has no relation to sound D. none

56. Sound cannot travel through _____
A. air B. solids C. vacuum D. liquids

57. Which of the following is the transfer of heat by movement of a fluids?
A. conduction B. radiation C. convection D. All

58. Substances that allow heat energy to be transferred through them are called _
A. insulator B. conductor C. semi conductor D. heat

59. A component which is used to close or break a circuit is __
A. wire B. switch C. bulb D. electric cell

60. The region around a magnet where its influence is felt is called
A. magnetism B. magnet C. magnetic field D. none