BOLE SUB CITY ADMINISTRATION EDUCATION BUREAU GRADE 8 GENERAL SCIENCE MODEL EXAMINATION

2015/2023

NUMBER OF QUESTIONS: 60 **TIME ALLOWED: 1 HOUR**

GENERAL DIRECTIONS

THIS BOOKLET CONTAINS **EXAMINATION OF GENERAL SCIENCE**. IN THIS EXAMINATION THERE ARE A TOTAL OF 60 MULTIPLE CHOICE QUESTIONS. CAREFULLY SELECT THE BEST ANSWER AND BLANCKEN 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.

1. A commonly indigenous unit that is a linear distance measure of a person's extended walk is
   A. pace
   B. cubit
   C. foot
   D. digit
2. All are fundamental or basic physical quantities **except**?
   A. Time
   B. . Mass
   C. Length
   D. Area
3. Which one of the following derived quantity **does not** match with its SI unit?
   A. Area – m^2
   B. Volume – m^3
   C. Speed – kg/m^2
   D. Acceleration – m/s^2
4. The decimal representation of the prefix **centi** is _____.
   A. 0.01
   B. 0.001
   C. 0.0001
   D. 0.00001
5. When we convert 0.6 km to cm?
   A. 0.006 cm
   B. 6000 cm
   C. 60000cm
   D. 0.0006 cm
6. The measurement of a certain physical quantity are precise when the measurement values are _____.
   A. close to the accepted value
   B. far from the accepted value
   C. close to each other
   D. far from each other
7. Which one of the following **does not** include a sub atomic particle that is a building block for an atom?
   A. Nucleus
   B. Neutron
   C. Electron
   D. proton
8. What are the atomic and mass numbers of element whose atoms are made up of 13 protons, 14 electrons and 14 neutrons respectively?
   A. 13, 27
   B. 16, 32
   C. 14 , 28
   D. 13 ,33

9. All of the following statements are correct about atomic and mass numbers **except one**?
   A. Number of protons =atomic numbers
   B. Mass numbers =atomic numbers
   C. Number of electrons =atomic numbers
   D. Number of electrons =number of protons
10. Which of the following is a polyatomic molecule?
   A. O_2 C. Cl_2
   B. He D. P_4
11. In naming hydrocarbons, the **suffix** tells us ---------.
   A. the number of carbon atoms C. the number of hydrogen atoms
   B. functional groups D. the use of hydrocarbon
12. the formula of alkyne that contains 6 carbon atoms is
   A. C_6H_{14} C. C_6H_{22}
   B. C_6H_{12} D. C_6H_{10}
13. The name of hydrocarbon having the formula C_4H_6 is
   A. butyne C. pentyne
   B. butene D. butane
14. A bottled gas which is commonly known as " buta gas" used for cooking and heating is
   A. Butane (C_4H_{10}) C. ethyne (C_2H_2)
   B. methane (CH_4) D. ethyl alcohol
15. From the following, which element **do not** react with oxygen form oxides?
   A. Magnesium C. Calcium
   B. Gold D. Aluminum
16. Which one of the following **does not** the property of bases?
   A. It has bitter taste C. it changes the color of red litmus paper to blue

B. it neutralize the bases D. it reacts with acid to give salt

17. If someone accidentally drink corrosive acids, what she/he take available in the pharmacy to neutralize the acid?

A. HCl C. Na_2CO_3

B. H_2SO_4 D. $Mg(OH)_2$

18. Which of the following salt is the component of baking powder?

A. $NaHCO_3$ C. $NaHSO_4$

B. Na_2SO_4 D. $CaCO_3$

19. All of the following are the functions of integumentary system **except**?

A. Protection C. Body movement

B. Maintain D. Excretion

20. The property of the muscle that is the ability of muscle to give response for the stimuli which comes from motor neuron and hormone is _____.

A. Elasticity C. Contractility

B. Extensibility D. Excitability

21. Your body system performs different types of body movements like pumping the blood, digestion, circulation, breathing and others. So, which body system performs these activities?

A. Digestion system C. Circulatory system

B. Muscular system D. Respiratory system

22. Which axial skeletal part **does not** correctly match with its body protection?

A. Cranial –brain C. Vertebral column –Spinal cord

B. Ribs –Heart and lung D. Cranial – Kidney

23. Finger like projection which absorbs digested food in to the blood vessels at small intestine?

A. Villi C. bronchi

B. Alveoli D. Bronchioles

24. Which disease of skeletal system is characterized by the break in the continuity of the bone?

A. Leukemia C. Osteopenia

B. Fracture D. Osteoporosis

25. Inflammation, irritation or erosion of the lining of the stomach is

A. Gastritis C. Constipation

B. Diarrhea D. Peptic Ulcer

26. The dental formula of an adult human is I $\frac{2}{2}$ C $\frac{1}{1}$ P $\frac{X}{3}$ M $\frac{3}{3}$. How much the value of 'X' in the above formula?

A. 3 C. 2

B. 1 D. 4

27. The respiratory structure that is found inside the lung which is used for gas exchange?

A. Larynx C. Bronchioles

B. Trachea D. Alveoli

28. The heart chamber that pumps oxygenated blood at long distance of the body is

A. right atrium C. left ventricle

B. right ventricles D. left atrium

29. The pathway of deoxygenated blood flow:

A. Lung → pulmonary vein → left atrium → left ventricle → aorta→ body tissue

B. Body→ venacava → right atrium → right ventricle → pulmonary artery → lung

C. left ventricle → aorta→ body tissue Lung → pulmonary vein → left atrium

D. right ventricle → pulmonary artery → lung →Body→ venacava → right atrium

30. A chronic and progressive condition in which the heart muscle is unable to pump enough blood is

A. heart failure
B. heart attack
C. stroke
D. hypertension

31. Which female reproductive structure is the site for fertilization?

A. Uterus
B. Oviduct
C. Ovaries
D. Vagina

32. Which one of the following **correctly** match the type of sexually transmitted disease with its cause?

A. Chanchroids ---Treponema Palladium
B. Syphilis—Hemophilus Ducreyi
C. Gonorrhea—Neisseria Gonorrhea
D. HIV/AIDS--AIDS

33. The tricuspid valve in the heart prevent the back flow of blood from

A. Pulmonary artery to right atrium
B. Right ventricle to right atrium
C. Aorta to left ventricle
D. left ventricle to left atrium

34. Which male reproductive structure is a common passage for both sperm cells and urine?

A. Scrotum
B. Testis
C. Urethra
D. Ureter

35. Identify the biotic components from the following examples in an ecosystem?

A. Soil, water, plant and animal
B. Decomposers, air ,temperature and light
C. Producers, Decomposers and algae
D. plants,climate,minerals and stone

36. One of the following is intra-specific interaction in the biotic components.

A. Birds with bird for competition of food
B. Lion feeds Buffalo
C. Crocodile with teeth cleaning birds
D. Nitrogen fixing bacteria with plants

37. Some birds are building their nests on the tree, such relationship is

A. mutualism
B. commensalism
C. parasitism
D. predator

38. Which relationship describe the interaction between ascaris and human?

A. Producer-Consumer
B. Prey-predator
C. Parasite-Host
D. Host-Decomposer

Answer question number 36 and 37 based on the given food chain below.

Grass → Grasshopper → Frog → Snake → Hawk

39. From the above food chain , the first and third trophic level respectively

A. Grass and Hawk
B. Grasshopper and Hawk
C. Frog and Snake
D. Grass and Frog

40. Which one is tertiary consumer?

A. Frog
B. Grasshopper
C. Snake
D. Hawk

41. Which statement is **incorrect** about trophic pyramids?

A. As we go from bottom to top the number of organisms increase
B. Pyramid of biomass consider the dry weight of organisms
C. Energy is lost in each trophic level
D. Pyramids are found at the base of the pyramid

42. Which types of element mostly needed for the growth of plants?

A. Phosphorus C. Oxygen

B. Sulphur D. Nitrogen

43. The process by which gas changed to liquid water in the water cycle is?

A. Condensation C. Precipitation

B. Evaporation D. Transpiration

44. Which statement is **wrong** about effect of air pollution?

A. Global warming is the rising of temperature

B. Global diming is the worldwide blockage of sunlight

C. Acid rain is the release of toxic substance in to the air

D. Afforestation is the activities of the growing trees

45. Which one of the following is an example of in-situ conservation?

A. National park C. Seedbank

B. Aquarium D. Zoo

46. Which one is the **correct** statement about the solar system?

A. Satellite moves around the sun

B. The largest and massive object in the solar system is Jupiter

C. Asteroids are members of the solar system

D. Mars is an example of dwarf planets

47. Which one of the following is the smallest and largest planet in the solar system **respectively**?

A. Mercury, Neptune C. Venus , Jupiter

B. Mercury, Jupiter D. Earth , Mars

48. Earth is the only planet in the solar system on which life is known to exist because it has

A. moderate temperature C. far distance from the sun

B. abundant oxygen D. A & B

49. Which one is the characteristics of jovian or outer planets?

A. They have low mass C. They are rocky

B. They have high density D. They have high mass

50. Which planet has revolution period of 365.25 days?

A. Saturn C. Mars

B. Venus D. Earth

51. A large cloud of gas and dust from which the sun,planets,astroids,meteors and moons be formed is

A. solar nebula C. mutual gravity

B. Satellite D. density

52. Which one of the following **is not** an example of natural source of light?

A. Sun C. Stars

B. Electrical bulb D. Lightening

53. When you placed a pencil in the partially filled beaker of water, the pencil looks as broken at the point where it enters the water. This is because of

A. Reflection of light C. Refraction of light

B. Imaging D. Dispersion of light

54. From the following, which statement is correct about properties of light?

A. Reflection is the bending of light rays

B. Refraction of light occurs when light travels in straight line

C. Violet light bends most during dispersion of light

D. Regular reflection happens from rough surfaces

55. Which one of the following **does not** true statement about the characteristics of the image formed by a plane mirror?

A. The image virtual and erect

B. The image is different size as that of the object

C. The image is laterally inverted

D. The image is as far behind the mirror as the object is in front of it

56. Materials **does not** allow any light to pass through them are called_____.

A. transparent
B. translucent
C. opaque
D. A & C

57. Sound travels through the following medium **except**

A. Solid
B. Vacuum
C. Liquid
D. Gas

58. A device in the circuit that produces light or heat when current is flowing through it

A. Battery
B. Switch
C. Resistor
D. Wire

59. If you hold accidentally a metal wire connected with fire, then your hand will be burn. So, by which mechanism of heat transferred?

A. Conduction
B. Radiation
C. Convection
D. Radiation & conduction

60. One of the following is **not** a magnetic substance?

A. Nickel
B. Steel
C. Iron
D. Plastic