**OTUAM AKWMBO 2024 QUIZ COMPETITION**

**FINAL CONTEST**

**ROUND ONE**

**ENGLISH LANGUAGE**

**30 Secs each.**

**With the first set of questions in this round, you are to spell the words that are going to be mentioned correctly for 3 points and each school has 2 attempts. A bonus question will be attempted by the preceding school and it attracts 1 point. Good luck!**

**1. a.** Pneumatic

**b.** Sycophant

**c.** Quandary

**d.** Repercussion

**e.** Rheumatism

**f.** Cirrhosis

**10 secs each**

**For this section, you are to provide a word that is nearest in meaning(synonyms) to the underlined words in the sentences.**

**2. a.** The **ecstatic** child couldn’t stop smiling. **Ans**: **joyful, happy, delighted, exuberant, radiant, euphoric, thrilled, blissful and any suitable word.**

**b.** The **stunning** sunset took my breath away. **Ans: gorgeous, beautiful, pretty, lovely, attractive, resplendent, splendid, eye-catching and any suitable word.**

**c.** My father has encouraged us to show **benevolence** to the needy in the society. **Ans: kindness, courtesy, compassion, kindheartedness, generosity, goodness, charity and any suitable word.**

**d.** It is **preposterous** to force the vegetarian to eat 15-ounce meat. **Ans: senseless, insane, crazy, unreasonable, foolish, stupid, insane, unthinkable, ridiculous, nonsensical, irrational, absurd and any suitable word.**

**e.** The **enchanting** sight of stars in the sky was mesmerizing. **Ans: captivating, charming, attractive, appealing, dazzling, delightful, pleasant, lovely and any suitable word.**

**f.** In the hospital, for some **inexplicable** reason, the nurse had an argument with the patients. **Ans:** **unexplainable, irrational, unusual, unreasonable, illogical, unaccountable, indescribable incomprehensible**.

**For this section, you are to provide a word that is nearly opposite in meaning(antonyms) to the underlined words in the sentences**

**3. a.** My baby sister looks **podgy** at age four. **Ans**: **thin, slender, skinny, lean, slim, lanky, angular, gaunt, skeletal, rawboned and any suitable word**

**b.** Mrs. Adamu used to be a very **proficient** seamstress. **Ans: incapable, unskillful, inexperienced, incompetent, inefficient, unskilled, untalented, inept and any suitable** **word.**

**c.** The time has come for the firms to **consolidate** after several years of expansion. **Ans: disperse, scatter, disjoin, separate, disconnect, divide, split, disunite, break away, disband and any suitable word.**

**d.** One of Mrs. Bedwin’s companies has introduced **sophisticated** gadgets into the market

**Ans: simplified, simple, easy, noncomplex, uncomplicated, untangled and any suitable word.**

**e.** It seems **incongruous** to be sitting here in the sun with a fur coat on. **Ans:** **appropriate, right, suitable, proper,** **correct and any suitable word.**

**f.** A headache can be **aggravated** by too much exercise, stress and alcohol. **Ans: relieved, eased, lessened, calmed, soothed, reduced, alleviated and any suitable word.**

**10 secs each**

**From the questions below identify the subject, object and the predicate in each sentence**

4. a. The old house at the corner has a big garden in the backyard. **Ans:**

**Subject** – The old house at the corner

**Object** – a big garden

**Predicate** – has a big garden in the backyard

b. A dog with brown and white spots ran by my bus last week. Ans:

**Subject** – A dog with brown and white spots

**Object** – my bus

**Predicate** – ran by my bus last week

c. Five workers from my office are going to leave the files today. Ans:

**Subject** – Five workers from my office

**Object** – the files

**Predicate** – are going to leave the files early today

**30 secs each.**

**Parts of speech of a sentence**.

**5. a.** I am an adjective, I show a noun’s quality or characteristics. What type of adjective am I?

**Ans. Descriptive Adjective**

**b.** I’m an adjective, I point out to specific nouns. What type of adjective am I?

**Ans. Demonstrative Adjective**

**c.** I am an adjective, I am used together with nouns to ask questions. What type of adjective I am? **Ans: Interrogative adjective**

**10 secs each**

**You are required in these last set of questions to provide meaning to these underlined idiomatic expressions.**

**6. a.** Please do not bother me today, I have **bigger fish to fry.** This means that I ….

**Ans:** **Have more important things to do, more serious things to do, more necessary things to do**

**b.** Esi was so good a leader that we were all encouraged **to take a leaf out of her book**. This means we were all encouraged to ...... **Ans:** **follow her example, emulate her leadership skills, imitate her leadership skills.**

**c.** A good leader always **keeps his ear to the ground** and knows when people are not happy. This means the leader…. **Ans:** **stays informed about his people, aware or attentive to his people**

**d.** Even though I lost my job, I now spend more time with my family; **every cloud has a silver lining**. This means…. **Ans:** **There is something positive in every negative situation**

**e.** A desperate man may **clutch at straws** to save himself. This means that he may ….

**Ans: try all means, willing to do anything**

**f.** Araba’s visit was a **bolt from the blue**. This means the visit was …. **Ans:** **a complete surprise, totally unexpected**

ROUND TWO

**Science**

**30 secs each**

**Matter**

**1.** To each school; There are three particles of matter name any of them and define it.

**Ans: Atom, Molecule and Ion.**

**Atom** is the smallest particle of an element that can take part in chemical reactions OR an atom is the basic building block of all matter.

**Molecule** is made up of two or more atoms chemically combined

**An ion** is an atom or group of atoms that has a net electrical charge due to a loss or gain of one or more electrons.

**10 secs each**

**Mixtures**

**2.** **a.** The technique used to separate those solutes of a mixture that are soluble in the same solvent is called…. **Ans:** **Chromatography**

**b.** ……. is a mixture of particles of an insoluble substance and a liquid whereby the particles of the substance float in the liquid. The small particles settle at the bottom of the container when it is left undisturbed. **Ans:** **suspension**

**c.** A **….** is a suspension in which the suspended particles are very small in size but bigger than the molecules of the solvent and are permanently suspended/does not settle on standing. **Ans: Colloid**

**10 secs each**

**Introduction to science and technology**

**3. Preamble to all schools. Listen carefully: From the options lettered I to IV, carefully select the correct option(s) for each question**

**a. Which among these subjects** is considered as Applied Science

I - Engineering

II - Chemistry

III - Agriculture

IV – Biology

**Ans: I, III**

**b.** Which of the following best defines science

I – Method of obtaining knowledge through observation and experimentation

II – Applications of the scientific method and knowledge to attain practical goals

III – A system of knowledge covering general truths

IV -  A discipline that builds [knowledge](https://en.wikipedia.org/wiki/Knowledge) in [hypotheses](https://en.wikipedia.org/wiki/Hypotheses) and [predictions](https://en.wikipedia.org/wiki/Prediction)

**Ans: I, III, IV**

**c.** In which of the following areas has technology had an impact in human lives

I – Entertainment

II – Transportation

III – Medical Advancement

IV – Agriculture

**Ans: I, II, III, IV**

**10 secs each.**

**Digestive** **System**

**5. a.** Which glands is responsible for producing insulin, the main hormone in the body responsible for sugar metabolism? **Ans:** **Pancreatic gland**

**b.** The role of ……. and ……. in the small intestine is to increase the surface area of the small intestine for absorption of nutrients. These are….  **Ans: Villi and microvilli**

**c.** Which organ in the human digestive system is affected by the illness cirrhosis? **Ans: Liver**

**10 secs each**

**Soil**

**6. a.** The process of breaking down rocks into smaller particles by physical, chemical, or biological means is called…. **Ans:** **Weathering**

**b.** The addition of lime to soil is done to…. **Ans:** **Reduce acidity**

**c.** Mention two ways of restoring soil resources or nutrient. **Ans: mulching, organic composting, maintaining soil pH, practicing crop rotation, growing cover crops, having an establish vegetation buffer, avoiding tilling of soil, etc.**

**10 secs each**

**Farming System**

**7. a.** The practice of growing a single crop on the same land year after year is known as what? **Ans: Mono cropping**

**b.** Which type of farming system reduces the risk of crop failure due to pest and disease attacks? **Ans:** **Mixed cropping**

**c.** One principle used in crop rotation is that, …….. crops should be followed by…. rooted crops. **Ans:** **Deep rooted and shallow**

**10 secs each**

**Energy**

**8. a.** State the energy transformation that occurs in this activity

Using a flashlight battery to produce light in a bulb.

**Ans: Chemical energy → Electrical energy → Light energy + heat**

**b.** List any 2 reasons why energy should be conserved

**Ans:** **To reduce energy consumption**

**To reduce cost of utility bills**

**To reduce demand and preserve natural resources**

**To protect the environment by reducing greenhouse gas emissions**

**c.** Mention any 3 sources of chemical energy

**Ans:** **Sources of chemical energy**

**Chemical reactions/Oxidation/Combustion  
 Food/carbohydrates/starch/glucose  
 Petroleum/Kerosene/Petrol/Diesel oil  
 Fossil fuels/firewood  
 Dry cell/generator/batteries/accumulator**  
 **Natural Gas**

**10 secs each.**

**Mixtures**

**9.** State the method that could be used to separate each of these compounds:

**a.** Iodine and sand. **Ans: sublimation**

**b.** Ethanol and water. Ans: **distillation**

**c.** Oil and water. Ans: **decantation**

**10. a.** Give 2 differences between heat and temperature. Ans:

|  |  |
| --- | --- |
| **Heat** | **Temperature** |
| Is the energy which causes rise in temperature of bodies | Is the degree of hotness or coldness of a body |
| Measured in joules | Measured in kelvin (K) or degree celcius (oC |
| It is a derived quantity | It is a fundamental quantity |
| It can be transferred from one body to another | Cannot be transferred from one body to another |

**b.** Differentiate between atomic number and mass number of elements.

**Ans:** **- The atomic number states the number of protons or electrons present in an atom while the mass number indicates the total number or the sum of protons neutrons present in an atom**

**c.** What is the difference between absorption and assimilation

**Ans:** - **Absorption** is the process of absorbing the digested food molecules or nutrients into the bloodstream while **Assimilation** is the process by which absorbed nutrients from food are utilized by the cells in the body for various activities

**ROUND THREE**

**Mathematics**

**30 secs each**

**Factorization**

**1. a.** Factorize completely  **Ans:**

**b.** Factorize completely **Ans: or**

**c.** Factorize completely **Ans:**

**30 secs each**

**Angles**

**2. a.** The sum of the interior angles of a regular polygon is . Find the number of sides of the polygon. **Ans: 7**

**b.** The sum of the interior angles of a regular hexagon is . What is the value of each angle? **Ans:**

**c.** The sum of the interior angles of a regular pentagon is . What is the value of each angle? **Ans:**

**30 secs**

**Word problems**

**3. a.** A man has **8x** sheep and **15y** goats. If he sells **5x** sheep and **6y** goats, how many animals are left after the sales? **Ans. 3x+9y**

**b.** In 5years time, Jojo will be twice as old as he was 9years ago. How old is Jojo now? **Ans: 23**

**c.** What is the sum of the product and quotient of 7 and 7? **Ans: 50**

**4.** **a.** A boy has two mobile phones. One of them beeps every 4 seconds; the other beeps every 6 seconds. If the two phones are switch on at the same time, at what times will both phones beep together? **Ans: 12 secs 0r every 12 secs**

**b.** A boy bought 3 pairs of socks at Gh¢17.50ps per a pair and paid with Gh¢50.00 notes. How much change was he given? **Ans: Gh¢47.50ps**

**c.** A number x is subtracted from two times its square and the results is 45. Find the values of x. **Ans: x= 45 and 23**

**10 secs each**

**Number system**

**5. a.** Numbers that cannot be expressed as fractions are called**… Ans: Irrational numbers**

**b.** A positive integer that can be formed by multiplying two smaller positive integers or has one divisor other than 1 and itself is called…. **Ans: Composite number**

**c.** Apart from imaginary numbers all other set of numbers are subsets of the number set called…. **Ans: Real Numbers**

**30 secs each**

**Sets**

**6. a.** If P is a set, what is the mathematical term to describe all the subsets of set P? **Ans: Power set of P**

**b.** What is the number of subset in set **R,** if set **R =**  **Ans: 64**

**c.** Set Q is denoted by Q such that **Q R** where Q = prime numbers greater than 3 and less than 30. List the members of the set. **Ans: Q =**

**30 secs each**

**Algebraic expressions**

**What value or values of x makes the following fractions undefined?**

**7. a.**  **Ans: x = 3 or -3**

**b. Ans: x = 1 or -1**

**c. Ans: x =**

**30 secs each**

**Substitution**

**8. a.** If **3y = ,** find **y if x = 5. Ans: 14**

**b.** Given **,** find **E if m =10 and c = 4. Ans: 20**

**c.** In the relation **,** find **R if R1= 1 and R2= 3. Ans:**

**30 secs each**

**Change of subject**

**9. a.** Make U the subject from the relation **. Ans: or**

**b.** If **,** then T equals? **Ans:**

**c.** Make n the subject from the equation **. Ans:**

**Preamble to all schools**

**10.** Given that is a universal set such that **A={natural numbers less than 16}, B={multiples of 3 less than 16} and C={1,3,5,7,9,11,13}.** Find

**a.**  **Ans: 1,2,4,5,7,8,10,11,13,14}**

**b. Ans:**

**c. Ans:**

**ROUND FOUR**

**General Knowledge**

**In this round, each school will have two attempts to every question within 10 secs. A school will be awarded all the maximum 3 points if a question is answered correctly or 2 points or 1 point depending on the answer given. A bonus will last for only 4 secs and it attracts 1 point. You must listen to the questions well before you answer. Good luck to all schools in this round.**

**1. a.** What is the largest planet in our solar system? **Ans: Jupiter.**

**b.** The biggest star in the solar system is called…. **Ans: The sun**

**c.** Which planet is referred to us as the morning star? **Ans: Venus**

**2. a.** In the bible who was the King at the time David killed Goliath? **Ans: King Saul**

**b.** What was the first miracle Jesus Christ performed with reference to the bible. **Ans: Change water into wine.**

c. Which Prophet led the Isrealites out of Egypt? **Ans: Moses**

**3. a.** Who was the father of Prophet Mohammed? **Ans: Abdullah**

**b.** In Islam when we give alms to the poor, it is called… **Ans: Zakat**

**c**. When a male moslem pilgrimage to Mecca and returns, what name is he entitled to? **Ans: Alhaji**

**4. a.** The traditionalists call God…. **Ans: Supreme Being**

**b.** Traditionalists do what to show appreciation to the Supreme Being? **Ans: Pouring of libation and making sacrifices.**

**c.** Traditionalists pour libation through …… to the Supreme Being. **Ans: Their ancestors and the lesser gods.**

**5. a.** Mention 2 West African countries you know. **Ans: Ghana, Nigeria, Benin, Togo, Senegal, Cote D’Ivoire, Burkina Faso, Niger, Mali, Cameroon, Guinea, etc**

**b.** Mention 2 East African countries you know. **Ans: Kenya, Comoros, Uganda, Ethiopia, Somalia, Burundi, Malawi, Zambia, Zimbabwe, Sudan, South Sudan, etc**

**c.** Mention 2 North African countries you know. **Ans: Algeria, Egypt, Morroco, Tunisia, Libya, Mauritania, etc.**

**6. a.** The oldest Senior High School in Ghana is …. **Ans: Mfantsipim Senior High**

**b.** The oldest Castle in Ghana is …. **Ans: Elmina Castle**

**c.** Which ethnic group settled in Ghana first? **Ans: Guans**

**7. a.** Who is the queen mother of Otuam? **Ans: Nana Ama Ntwe III**

**b.** Who is the current Tufuhene of Otuam? **Ans: Nana Obrasi Dampang VII**

**c.** What is the name of the chief in Otuam? **Ans: Nana Ewusi Kwansa XIV**

**8.** To each school: Mention any two of the six additional regions created and state their capitals.

**Ans:** **Oti Region – Dambai**

**Savannah Region - Damango**

**Western North Region – Sefwi-Wiawso**

**Bono East Region – Techiman**

**North East Region – Nalerigu**

**Ahafo Region - Goaso**

**9.** From the Ghana National flag, tell us what this color symbolizes.

a. Red

**Ans:** **Red – represents the blood of those who died in the country’s struggle for independence.**

**b.** Yellow/Gold

**Ans: Yellow/Gold – represents the mineral wealth of the country.**

**c.** Green

**Ans: Green – represents the forestry and the vegetation of the country.**

**10. a.** The only Ghanaian who has served as UN secretary is called\_\_\_\_ **Ans: Kofi Annan**

**b.** President Nana Addo Dankwa Akuffo Addo is the\_\_\_\_ President in the fourth republic of Ghana. **Ans: Fifth**

**c.** Who is Ghana’s most successful boxer? **Ans: Azumah Nelson**

**ROUND 6**

**True and False**

**10 secs each.**

**For this round a major question to a school attracts 2 points. If a school fails to answer the question correctly, the school faces a penalty of -1. If a school chooses not to provide an answer to the question, it becomes a bonus to the preceding school for a point. Also if the preceding school provides a wrong answer, it faces the same consequence. Good luck to all schools in this final round.**

**1.** Theamount of organic matter, color and texture are used to describe a fertile soil.

True or **False**

**2.** The 5 forming factors of soil are climate, organism, time, bedrock and parent material.

True or **False**

**3.** Digestion begins in the stomach where food is broken down by acids and enzymes.

True or **False**

**4.** A preposition shows relationships between nouns (or pronouns) and other words in a sentence (e.g., location).

**True or** False

**5.** All synonyms can be used interchangeably in every context without changing the meaning of the sentence.

True or **False**

**6.** Conjunctions are used to connect words, phrases, or clauses within sentences but cannot start sentences themselves in standard English grammar rules.

True or **False**

**7.** King Agorkoli planted crops and made them to bear edible fruits in just a day.

True of **False**

**8.** The Nana Baatan of Otuam is called Nana Akweku Kyemenu VI.

**True** or False

9. Green, yellow and red are primary numbers.

True or **False**

10. The reciprocal of is .

**True** or False

11. If B and D are vertically opposite angles and so if angle B = 40, then angle D = 140.

True or **False**

12. The set M = {2,3,4,6}and it is a finite set. **True** or False

13. Technology refers only to electronic devices and computers used in daily life. True or **False**

14. Science is the systematic study of the natural world through observation, experimentation and application of the scientific knowledge.

Trueor **False**

**15.** Sulphur is considered a macro soil nutrient needed by plants

**True or** False

**Riddles**

**In this round, questions are posed to all schools in clues. If a school wants to answer the question, it should rig the bell for chance to be given to you to answer the question. If a school answers a question in the first clue, 5marks, on the second clue, 4marks, on the third and subsequent clues 3marks. There are three questions in this round.**

**1. 1st clue:** I am an arithmetical value, expressed by a word, symbol or figure.

**2nd clue:** I can be whole or fractional, positive or negative, but I always represent a quantity.

**3rd and subsequent clues:** I’m used to count things and measure quantities; without me, mathematics would be incomplete.

**Ans:** **A number**

**2. 1st clue:** I involve growing crops and raising animals for food production, but I’m not just about planting seeds.

**2nd clue:** I’m an approach that integrates various agricultural practices to enhance productivity sustainability.

**3rd and subsequent clues**: I’m a decision making unit comprising farm household, cropping and livestock system that transforms land and labor into useful products, which can be consumed and sold.

**Ans: Farming System**

**3. 1st clue:** I exist in all moving object for example a train rolling down the tracks.

**2nd clue:** The earth revolving around the sun, you walking down the street and molecules moving in space all have me.

**3rd and subsequent clues:** I am what an object has because of its motion. I am directly proportional to the mass of an object and to the square of its velocity.

**Ans: Kinetic Energy**

**END OF CONTEST**