

## SENIOR FIVE - HOLIDAY WORK - TERM 3, 2025

### ENTREPRENEURSHIP

You have been selected to guide traders of Kikuubo who have been requested to formalize their business. Among the required documents in a detailed business plan. The traders have confessed to lacking knowledge about a plan and are claiming it is a wastage of time.

#### **Task:**

- Select a given form of business and guide traders on essential elements of a business plan.
- Choose one element and prepare it dully as an illustration to traders.
- **NB: Type your work and sent it to email: [wamalabenjamin783@gmail.com](mailto:wamalabenjamin783@gmail.com)**

### **FINE ART: Attempt all**

1. Make a study or studies of a head of mature Chicken.
2. Draw or paint a landscape with clear vegetation in the foreground, a building in the middle ground and some trees in both the middle and background.
3. A new Agricultural Institute called "**St Anthony Agricultural Institute**" is yet to open in Kitta Trading Centre 2 km off Kitala – Kide road. Its Motto is "**Train and Excel**"

In an area between 50 cm x 40 cm, design a sign post for the above-named institute. Postal Address is 5078 Kide. Tel: 0775 507800. Use not more than 4 colors.

### **CHEMISTRY**

Aromatic hydrocarbons are used as solvents and precursors for industrial synthesis. One such application is manufacture of dyes and pharmaceuticals by nitration and combination of aromatic compounds. Currently benzene is used as the starting material but research shows that methyl benzene may act as a starting material too. Following a recent safety audit and introduction of new environmental regulations, schools in your district have been invited to compete in an essay competition which involves writing an article on the title "**A comparative analysis of switching from benzene to methyl benzene for nitration reactions**"

In an article you are tasked to help the manufacturers make a safe, efficient and environmentally responsible choice

#### **Task:**

- a) Compare,
  - i) The molecular structure and stability of the suggested starting compounds. Explain your answer.
  - ii) Their reactivity towards nitration or bromination reactions (including conditions, equations and mechanisms for the reactions)
- b) Explain how the role of the methyl group in the reaction undergoes by the two compounds in (a) above.
- c) Identify two health hazards associated with the exposure to the currently used starting compounds
- d) Describe two potential environmental impacts of using the suggested alternative compound in industrial processes

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- e) Based on your analysis on structure, stability, reactivity and safety, recommend whether benzene should be continuously used or a switch o methyl benzene is necessary.
- f) Justify your recommendation with at least two chemical and safety reasons.

### TECHNICAL DRAWING

A house owner wants to build a two-bedroomed residential house on a small plot. The architect provides the following actual room dimensions.

Living room:	6m x 4m
Kitchen:	4mx 3m
Master bedroom:	5m x 4m
Bedroom 2:	4m x 3m
Bathroom:	2.5m x 2m

- a) Using a scale of 1:100 develop a suitable plan of the proposed building
- b) Draw a pictorial view of the building
- c) Draw to a scale of 1:100 a sectional elevation of the building showing the construction details.

### HISTORY (World Affairs)

The growing abolitionist movements in Europe and the United States in the late 18<sup>th</sup> and early 19<sup>th</sup> centuries sought to end the transatlantic slave trade and provide freed slaves with opportunities for a new life. Sierra Leone was founded in 1787 by British abolitionists as a settlement for freed slaves. It was established by the British to resettle formerly enslaved Africans, particularly those who had fought for the British during the American Revolutionary War in exchange for freedom (known as Black Loyalists). The Freetown settlement became a haven for freed slaves. Similarly, Liberia was founded in 1822 by the American Colonisation Society (ACS), which aimed to resettle freed African Americans and freed slaves from the United States. The ACS believed that freed slaves would face better opportunities in Africa and that their resettlement would help spread Christianity and "civilization."

**Task: Analyse the factors that led to the founding of Sierra Leone and Liberia to appreciate the impact Trans-Atlantic slave trade on Africa.**

### DIVINITY

Then the LORD God made the man fall into a deep sleep, and while he was sleeping, he took out one of the man's ribs and closed up the flesh. He formed a woman out of the rib and brought her to him. Then the man said, "At last, here is one of my own kind — Bone taken from my bone, and flesh from my flesh. 'Woman' is her name because she was taken out of man." That is why a man leaves his father and mother and is united with his life, and they become one. **Genesis 2:21-24 (GNB)**

### Task

- a) How can marriage be strengthened today in light of the Bible text above?
- b) Examine ways in which some husbands today treat their wives that contradict with God's intended aims reflected in the Bible text above.

**DIVINITY 2: THE NEW TESTAMENT.**

**ITEM 3:** “Many miracles and wonders were being done through the apostles, and everyone was filled with awe. All believers continued together in close fellowship and shared their belongings with one another. They would sell their property and possessions, and distribute the money among all, according to what each one needed. Day after day they met as a group in the Temple, and they had their meals together in their homes, eating with glad and humble hearts, praising God and enjoying the good will of all the people and every day the Lord added to their group those who were being saved. **Acts 2:43-47. (GNB)**

**TASK:**

(a) Examine the way of life of Christians in Uganda today that is reflected in the Bible text above.

(b) Explain the negative way of life of some Christians in Uganda today that conflict with that of the Bible text above.

**ITEM 4:** “Consider the experience of Abraham; as the scripture says “He believed God and because of his faith God accepted him as righteous.” You should realize, then, that the real descendants of Abraham are the people who have faith. The scripture predicted that God would put the Gentiles right with himself through faith and so the scripture announced the good news to Abraham: “Through you, God will bless all people”. Abraham believed and was blessed; so all who believe are blessed as he was”. **Galatians 3:6-9. GNB.**

**TASK:**

(a) Examine the benefits of faith as reflected in the Bible text above.

(b) How is the New Testament a continuation of the Old Testament according to the Bible text above?

**SECTION C: ETHICAL ISSUES**

**ITEM 5:** Kibaati is a certain urban area in Uganda that is known for sexual immorality. Among the cases of sex deviation carried out in this area include: Prostitution, homosexuality, fornication and public sex. Young girls who drop out of school yearn for this area to carry out sexual activities in order to earn a living. Many sexual workers in this area are contented with the work they are doing and vow not to leave it.

**TASK:**

(a) Explain the Christian teachings that can enable the people in the scenario above to respect sex and sexuality.

(b) How can some traditional African values on sex and sexuality be used to bring back sanity among the people in the scenario above?

**ITEM 6:**

“In the same way you wives must submit yourselves to your husbands, so that if any of them do not believe God’s word, your conduct will win them over to believe. It will not be necessary for you to say a word, because they will see how pure and reverent your conduct is. You should not use outward

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aids to make yourselves beautiful such as the way you fix your hair, or jewelry you put on, or the dresses you wear. Instead your beauty should consist of your true inner self, the ageless beauty of a gentle and quiet Spirit, which is of the greatest value in God's sight. For the devout women of the past who placed their hope in God used to make themselves beautiful by submitting themselves to their husbands. Sarah was like that; she obeyed Abraham and called him her master. You are now her daughters if you do good and are not afraid of anything. In the same way you husbands must live with your wives with proper understanding that they are more delicate than you". **1 Peter 3:1-7.**  
**GNB.**

### **TASK:**

**(a) How can the Bible text above enable Christians to curb down the problem of domestic violence in families?**

**(b) Explain some marriage practices in society today that differ from those in the Bible text above.**

### **ICT**

1. What is a device driver? Name two devices that may require the installation of device driver to work properly.
2. Name two kinds of information normally required to log on to a multiuser operating system.
3. Describe briefly why virtual memory is slower than physical memory
4. Give two advantages of using a print spooler
5. How is multitasking different from multiprocessing?
6. Explain briefly why system software is also important for application software to work properly.

### **AGRICULTURE (Attempt all)**

**Item 1:** James is a prominent millet farmer. He planted when the soils were too dry and a few seeds germinated since the ground had formed hard pans. The Pore spaces were also very small hence the plant roots could not establish well. The millet plants had slender stems and remained short. The soil test results indicated that it had pH3. Available information shows that millet grows better at pH 6.5 in well drained Soils. He needs help since he believes that millet is very profitable and has a plan of growing it the next season.

**Task:** Advise James on proper soil management and improvement for his millet crops to do better.

**Item 2:** Mukisa is a poultry farmer. He bought chicks from 3 friends to start his laying flock. The house had many small holes in the roof and a small wire mesh at the upper part of the door. The litter was of a thin layer and this made it to cake in the first three weeks. He only provided the heat Source in the brooder in the

evenings. Every Morning, he fills the water in the drinkers and feeds in the feeders adding on the previous remains. Some birds developed diarrhea and drooping wings. A few birds started laying eggs and was unable to identify those that were not laying. The eggs had cracks while some birds had wounds on their toes and others could not move properly.

**Task:** Advise Mukisa on how to improve his poultry production enterprise profitably.

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### LITERATURE IN ENGLISH PROSE

In your community, look for the oldest person (above fifty years). Have a conversation with them about their youthful days. Using figurative language, write a prose piece about his/her experience in contrast with what is happening today. **(500 - 600 words)** **(Report back with the details of that person).**

### NOVELS

Summarise the remaining chapters of the **Moon Also Sets** by Osi Ogbu.

### DRAMA

Download and watch the play Richard III from the internet. After watching explain what happens to Richard in the end and show whether he deserved it.

### GENERAL PAPER

Continue with your research project. Report back with answered questionnaires of not less than twenty respondents and an interview guide that will be used in our interaction with the LC1 Chairperson of your area.

### GEOGRAPHY

#### 1. Modern Agriculture And Development

**Item 1:** In the districts of Luwero and Nakaseke, farmers have adopted greenhouse farming and drip irrigation to improve tomato production. However, despite increased yields, market access and post-harvest handling remain problematic. This has therefore made the local farmers to refrain from modern Agricultural techniques and this has affected their social status and well being. The ministry of agriculture has called for a community meeting to see ways of addressing market related challenges in the respective districts. The farmers have identified you to help them forward their views to the Ministry.

#### Support material



#### Task: What will be your views? (20 scores)

**Item 2:** Recently, the private sectors under Agricultural development Uganda are engaged in transforming local agriculture communities into modern economies through genetically modified (GM) inputs such as maize seeds. Their emphasis is to have high yields and a steady agricultural economy among the local communities. This has taken it's shape in Eastern Uganda where maize seeds which are genetically modified have been distributed among the local farmers. However, local farmers express concern about cost, soil exhaustion and seed dependency.

**Support material**



**Task: In an essay, give implications of adopting biotechnology in agriculture on both food security and sustainability in Uganda. (20 scores)**

**Item 3:** In Western Uganda, commercial coffee farmers have received support in the form of fertilizers and machinery. This has led to high quality yield production and improved standards of living among the coffee farmers. However, smallholder farmers continue to struggle with outdated methods of farming which has made them see it as an unequal distribution of modern agricultural inputs and funds to boost them equally in terms of development among their local communities.

**Support material**



**Task:** Write an article to the Ministry of Agriculture under the local government evaluating the impact of unequal access to modern agricultural inputs on rural development and income distribution. **(20 scores)**

## **2. Settlement And Urban Growth**

**Item 4:** The population of Mbarara Municipality has rapidly increased over the last decade leading to congestion, housing shortages and slum development. This has affected the government expenditures in balancing the services to the locals not only in Mbarara but also other rapidly growing urban secondary towns in Uganda. The human resource manager of Kampala Capital City Authority (KCCA) contacted you to point out what could have evoked such related issues of rapidly increased urban secondary growth of towns and ways of addressing it.

Support material



**Task: Write your message to the Human Resource Manager. (20 scores)**

**PHYSICS**

**ITEM 1:** Physics students were presented with a spectrometer and glass prism. They are required to investigate: The angle of minimum deviation and deduce the refractive index of the glass prism. How the refractive index changes with the color of light. The students are puzzled as they could not recall clearly how to make spectrometer adjustments and steps to carry out investigations.

Suppose for a certain prism with a refracting angle  $60^0$  a student finds the angle of minimum deviation as  $38^0$  but could not use this information to compute the speed of light through the prism.

*HINT: Speed of light in vacuum =  $3.0 \times 10^8 \text{ ms}^{-1}$ .*

**TASK:** As a physics student,

- Assist the students with their investigations (include necessary derivations).
- Help the student to make the required computation.
- How to determine the angle of minimum deviation of a glass prism using optical instruments and give three uses of a glass prism.

**ITEM 2**

**(a)(i)** What is meant by dimensions of a physical quantity?

**(ii)** Use dimensional analysis to show that Nm and J are equivalent

**(b)** Define the following terms as applied to projectile motion

**(i)** Angle of projection

**(ii)** Range

**(c)** A batsman strikes a ball horizontally when it is 1m above the ground. The ball is caught 10cm above the ground by a fielder standing 12m from the batsman. Find the speed with which the batsman hits the ball.

**(d) (i)** Define solid friction

**(ii)** Explain using molecular theory the origin of solid friction

**(e)** A car of mass 1 tonne moves along a straight track with a speed of  $72 \text{ kmhr}^{-1}$ . The car comes to a stop when brakes are applied steadily after travelling a distance of 0.09km. Calculate the coefficient of friction between the surface of the track and the tyres and state the energy changes which occur as the car comes to rest.

The Senior Five Physics class is conducting an experiment on the **superposition of waves** using a signal generator and a vibrator attached to a long, taut string.