



ASK INTEGRATED TEACHERS' EXAMINATIONS BUREAU LIMITED

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Uganda Certificate of Lower Secondary Education BIOLOGY HOLIDAY WORK 2024 SENIOR THREE

INSTRUCTIONS: *Try out all items, Respond to this work during Holiday time, all answers should be written in a new holiday book.*

ITEM 1

- (a) A senior one learner of Phresh High school wants to do Biology at A level but he/she claims that drawings may fail him/her because he/she does not know how to make good biology drawings. Guide your this learner about does and don'ts he/she should follow when drawing in biology.
- (i) Do's (05 scores)
 - (ii) Don'ts (05 scores)
- (b) This learner still needs help on how the information you provided above can be observed. Pick the jack fruit leaf from the tree draw it, showing only external features for this learner to use it to know more on the do's and don'ts you gave him/her. Show this learner how you can calculate for the magnification of your drawing. (05scores)

ITEM 2

At the start of the season, the ministry of Agriculture, under the Parish model supplied a new variety of tomato species seeds to people of Yumbe district. The variety was well known for its high productivity and resistance to disease. Mr. Kidega, one of the renowned farmers in the area and a beneficiary of the program, prepared his garden, applied fertilizers and planted the seeds. After a month, Kidega observed that most of the tomato plants either drooped their leaves or shed them off during hot days. Some of the tomato plants had yellow leaves. He eventually realized a very poor yield at the end of the season.

Task

- (c) Identify the challenge faced by the plants in the garden.
- (d) Which processes in the tomato plants were affected? Explain how the effect on the processes led to the poor yields observed.
- (e) How can Mr. Kidega improve his yields of the tomatoes next season?

ITEM 3

Kipsang, a long-distance athlete, trains at a high altitude in the mountains and this has increased his performance with time. On day of the race, he had a heavy carbohydrate meal and then started to warm up in preparation for the race. Kipsang competed favorably, but towards the end, he developed muscle cramps and was breathing profusely. He however endured the cramps until he won the race. After the race, his profuse breathing continued, while the muscle cramps progressively receded.

Task

- (a) How does training in the high mountains increase Kipsang's performance?
- (b) Explain how the body utilised the morning meal to enable him win the race.
- (c) Analyse the challenges encountered by his body during the race and how it overcame them.

ITEM 4

Two farmers Paddy and Jaliah planted equal acreage of maize in the same season. Paddy's garden is near an extremely dusty and busy murram road, while Jaliah's garden is very far away from the road. The maize in both gardens showed different growth rates, despite being under similar weather conditions and soil profile. The garden for Jaliah was invaded by caterpillars at flowering stage, however, the maize managed to give yields before that of Paddy.

Task

- (a) Point out the major processes and organs affected by the prevailing conditions in the garden of the two farmers.
- (b) Explain how the conditions in the garden of Mr. Paddy were responsible for the delayed yields.
- (c) How did the maize in the garden of Madam Jaliah finally managed to give yields despite all the challenges.

ITEM 5

Reagan and Fred, both considered strong contenders as athletes, were expected to lead their respective classes to victory in the inter-class competitions. However, on the day of the event, Fred consumed a heavy carbohydrate meal while Reagan abstained from eating. Despite this, Fred won all his races while Reagan struggled and eventually collapsed during one of the races. Reagan had to be carried off on a stretcher, breathing rapidly and heavily and was able to recover after giving him glucose and enough resting time.



Task

Explain the physiological role of nutrition in athletic performance, identify the problems faced by Reagan and propose solutions to optimize performance and prevent adverse outcomes in similar situations.

ITEM 6.

John, a 10-year-old boy, had an accident as he was moving from school to home on a motor cycle. He had severe bleeding and lost a lot of blood which made him unconscious. Following close examination, the doctor decided that he needed an immediate blood transfusion. John is of blood group B and present at the hospital are John's mother of blood group A, his elder sister of blood group AB and his younger brother of blood groups O.

Task.

Work out the possibility of each of John's relatives to successfully transfuse blood to him, and suggest remedies that could save his life.

ITEM 7

Michael joined a group of young boys who sniff petrol and smoke marijuana frequently. The group became known for crime, violence and causing chaos in training centers.

Michael and his group members were one day surrounded by policemen and the policemen fired gun shots at them. This caused Michael's heart beat to increase suddenly and he ran very fast to their home.

SUPPORT MATERIAL



Task

- What challenges do you think Michael may face if he continues associating with such a group.
- Describe how Michael's body coordinated and made him reach home.
- Explain how Michael can avoid challenges associated with being in such a group.

ITEM 8

Queen Elizabeth National park has abundant wild life, including several plant species, kobs, Nile crocodiles, lions, hyenas and wild rabbits. People from neighbouring community illegally hunt kobs and wild rabbits for meat. This affects the stable interdependence among wild life and as a result, other deadly wild animals then attack human life and their domestic animals as escape from the park to neighboring community. Due to loss of human life and effect on tourism sector, government calls upon potential people to sensitize the community about the current situation.

Task.

Explain how various human activities affect the interdependence of the above organisms and sensitize the community on outcomes of their activities and likely possible benefits they avoid such activities.



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Uganda Certificate of Lower Secondary Education CHEMISTRY HOLIDAY WORK 2024 SENIOR THREE

INSTRUCTIONS: *Try out all items, Respond to this work during Holiday time, all answers should be written in a new holiday book.*

ITEM 1

The Ministry of Energy and Mineral Development has organized a conference to educate the public about management and development of natural resources including rocks. However, they have failed to get a specialist who is going to educate the people about these rocks. In an interaction with your chemistry teacher, you have been recommended as the guest speaker for this conference.

TASK

Write a speech that you would present to the people to help them understand how the different types of rocks are formed and how they can be used to boost the economy of the country.

ITEM 2

Air which is a mixture of different components contains 21% oxygen. Due to a wide spread of respiratory illnesses caused by COVID-19, there was an increased demand for oxygen by patients in hospitals. The government supply of oxygen is not enough and is planning to set up an oxygen production plant with minimal environmental impact. However, the science club members in your school would like to know how the process of production will be carried out.

Task

As chemistry student, make a write up you will use during the presentation.

ITEM 3

A farmer in village without electricity always keeps his garden tools outside the house after the work. After sometime, his tools developed a brown coating and he was disturbed about what happened.

Task:

As a chemistry student;

- Point out the environmental factors that led his tools to develop the brown coating
- State the properties of the one of the environmental factors listed in (a) above.
- What are the uses of the environmental factor in (a) above?
- What is the impact of the brown coating on tools and how it is solved?

ITEM 4

An industry wanted to produce lime for treatment of acidic soil. The production of lime involves of lime involves heating limestone strongly which results into its decomposition according to the equation.



The industry is also interested to know much gas is evolved during the process since the gas is useful. Before the production, an experiment was performed where 25g of limestone were heated until there was no further change. You have been contacted for help.

Task:

As a chemistry student;

- a) Explain the category of the products
- b) Suggest the properties of the product that makes it useful in daily life
- c) Calculate the volume of the gaseous product measured at s.t.p that was formed.
- d) Explain the impact of one of the products on the environment.

ITEM 5

Timothy owns a laundry shop in Busia border town. Being a new person in the area, he sent one of the water sellers to collect for him water for use. While cleaning some of his client's white clothes, using the available detergent, she realised that some brown spots remained on them yet he had rinsed it severally. This has left Timothy wondering and has approached you for some pieces of advice.

Task: As chemistry learner;

- (a) Explain to Timothy the mistake he made when choosing the product.
- (b) Guide Timothy to understand how the product works.

ITEM 6

Soap is the chief material commonly used to facilitate washing. Of recent, there has been countrywide outcries to the government about the high costs of soap for domestic use. This is partly because of the few industries producing soap in the country. To ensure efficient supply of soap, recently the government secured some land for the local investors to set up another soap production plant in one of the villages in Tororo District. However, the local people are concerned about its environmental impact and their valuable land that is about to be taken by the investor. The community members are also wondering how the process of soap production will take place. As a result, the District Chairperson has called for a meeting with the investor and the Local Representatives.

Task

As a chemistry learner, make a write up you will use during the presentation upon invitation.

ITEM 7

Bagalana Steven lives along the channels of a water body which supplies the entire village of Masajja with water. He has many cows which drink and move within the water body. He has a big plantation of crops next to the water body on which he uses a massive amount of fertilizers to ensure that he get high yields. He normally cools his machines in water and his wife earns a living by washing clothes daily for people in Masajja. The wife uses detergents and soap to wash the clothes

Task.

Write a piece of advice to Bagalana Steven letting him know about the ways his family and activities pollute the water body, the possible effects the pollution could do to Masajja and how he can participate in solving the problem of water pollution in the area.

ITEM 8

During her school holidays, Eva visited her Aunt who works at a stone quarry, she noticed that explosives were being used to blast big rocks to form small stones (aggregates) and there was a lot of dust rising into air. Besides the social benefits, Eva was concerned about what would happen to the site and community if the activity continued overtime.

Task

As a learner of chemistry, make a write up to respond to Eva's concern.



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Uganda Certificate of Lower Secondary Education History & Political Education HOLIDAY WORK 2024 SENIOR THREE

INSTRUCTIONS: *Try out all items, Respond to this work during Holiday time, all answers should be written in a new holiday book.*

ITEM 1

People in Kampala originated from different ethnic back ground for example the Acholi, the bamasaaba, kunya Luo, the Congolese and the south Sudanese, dinkas, kuku, Nuer, kawa, madi, Basoga, Baluli and shiluk. A number of people who lived in manafa in eastern region of Uganda were forced to move to Kampala following landslides claimed 150 lives and displaced over 500 people

- Using the knowledge of migration into east Africa, suggest reason why you think your community could have been forced to migrate
- Discuss the impact of this migration on the local people?

ITEM 2

The university students studying archaeology and heritage studies in one of Uganda's universities were tasked by their lecturers to move around the country and make field studies about Uganda's heritage sites. On returning from the field, the lecturers tasked them to present their findings. All students during their presentation expressed disappointment in the way these sites were being handled. The students remarked that most of these sites were bushy, inaccessible due to poor roads, their land grabbed and looked abandoned and this therefore threatened their existence. You are one of these students that observed this negligence and believe something must be done to preserve these places

Support material



The first court building in Uganda

Task:

Suggest possible ways in which this can be done

ITEM 3

In most of their speeches, presidents of African states condemn politicians who collaborate with western imperialists to disorganize their respective countries. African presidents believe that these politicians don't know how these imperialists oppressed and exploited African states during the second half of the 19th and first half of the 20th centuries. In order to popularise these dangers, African presidents through the African Union have organized an essay writing competition and the winner takes a big prize of 100,000 USD. Your school has chosen you to take part in these competitions and you feel you can win the money.

Support material



Europeans and their mercenaries during maji maji rebellion

Task:

Write an essay that can win the above prize

ITEM 4

African elections and governance are characterised by tribalism, nepotism, regionalism, among others. In 2022 however, William Ruto a Kalenjin by tribe from the rift valley areas of western highlands won the majority votes in areas of Kikuyu found in central Kenya hence becoming the president of that country. This surprised many people especially from Uganda who thought Raila Odinga, with massive support from president Uhuru Kenyatta a Kikuyu by tribe would win the region. While explaining how this came about, one Kenyan politician remarked that Kenya has gone beyond politics of identity characterised by religion, tribe and appearance as the case is in Uganda. Many Ugandans you inclusive believe that their country has to make changes following Kenya's government system if the country is to have clean politics which can bring about development.

Task:

Suggest those changes to the government of Uganda

ITEM 5

In 1972, President Iddi Amin of Uganda expelled Asians from Uganda who were primarily of Indian and Pakistan Origins. He attributed this to a number of reasons but majorly to Africanize the economy. He therefore gave out Asian owned businesses like shops and factories to the local people which later collapsed due to lack of experience in managing businesses and this affected the economy negatively. Later when the NRM government took over power, the Asians were welcomed back with a purpose of improving on the economy. But now there is growing concern among Ugandans that these foreigners have dominated almost all business activities, retail and whole sale trade, hotels, factories, etc. leaving them out. So they suggest that these people should leave and go back to their home countries.

Support material



BBC News, Published, 15 May 201: Ugandan Asians dominate economy after exile

Task

As a student of history and political education, advise the Ugandans to appreciate these people.

ITEM 6

When NRM came to power in 1986, it found many challenges in a country that had spent many years in civil unrests. One of the main challenges was the endless conflicts on land between the land lords and their occupants/tenants. The government introduced a number of reforms to address the land problem for good. These reforms included; 1998 Land Act, The National Land Use Policy 2007, Land Sector Strategic Plan 2011-2012, Land Amendment Act 2013 among others. Although all these policies have been introduced, there still exist many land problems including land grabbing, land encroachment, rampant evictions, having multiple land titles on the same piece of land, among others. The government has established a land commission to address all these problems

Support material



The Independent November 1, 2024: Church in Ndeeba brought down in battle over land 2020

Task:

Advise the land commission on how best it can handle the situation

ITEM 7

In areas of Bududa, river Manafa flooded and very many properties were destroyed including houses, gardens small scale industries while many of the people surrounding the river were left dead and a few who survived were relocated to the neighboring districts. The children of those who died are cautiously asking themselves many questions regarding to the origins of their parents and relatives and have failed to get the clear response.

Task

Explain to the above children the steps they should follow to know their origin.

ITEM 8

In 2021, the government of Uganda started to seriously look for a loan from various world bodies of about 2-3 trillion shillings in order to rehabilitate the meter gauge Uganda railway. This was aimed at reducing traffic congestion, facilitate business among other reasons. Many Ugandans however asked the government not to waste tax payer's money in projects that are of little help. They claimed that this money can be used in other sectors such as agriculture. The government insisted and secured some money such as 1.1 trillion shillings from the African Development Bank and started rehabilitating some lines. Some Ugandans however still believe this is wastage of money. In order to change people's attitude about the project, the government has organized various sensitization workshops and you have been sent to one region of the country to change people's attitude about the project.

Support material



One of the rehabilitated trains of the Uganda Railways Corporation

Task:

Write an essay you are going to use in your workshop



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Uganda Certificate of Lower Secondary Education GEOGRAPHY HOLIDAY WORK 2024 SENIOR THREE

INSTRUCTIONS: *Try out all items, Respond to this work during Holiday time, all answers should be written in a new holiday book.*

ITEM 1

Study Fig. 1, a photograph taken from Ruwenzori area in Western Uganda, and the text provided below it.



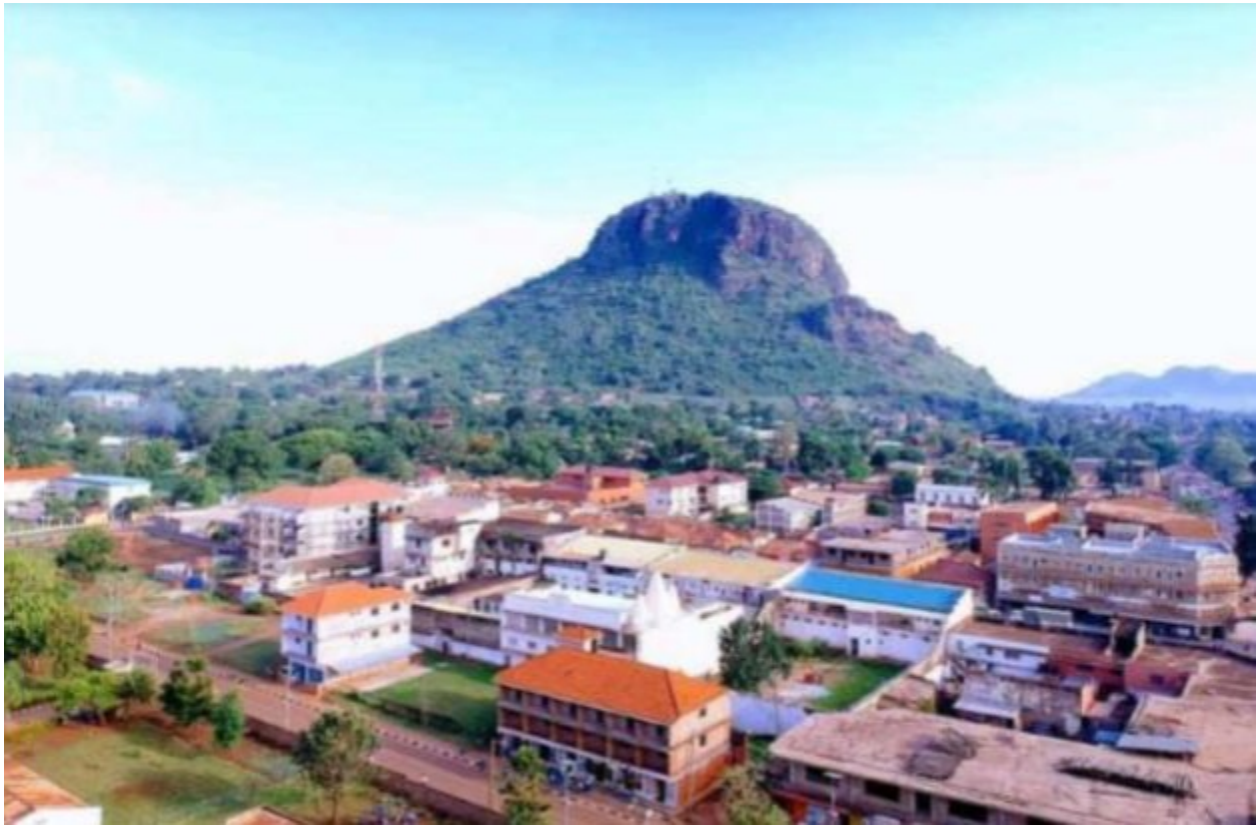
You are a geography teacher who has taken learners for a field trip to Kasese specifically Rwenzori areas. One of the learners is very inquisitive about knowing how landforms in the background were formed and how their impact on the lives of local people in the area.

Task:

- Draw a landscape sketch of the photograph and on it mark and name the features found in the area shown in the photograph.
- Explain to learners the mode of formation of the major landform found in the area shown in the photograph and how they affect the local people.

ITEM 2

Study the photograph below taken from one of the trading center and the text provided below to answer the questions that follow



You have assumed the role of the tourist guide in tours and travel company limited a group of tourists from Europe are planning to visit your country. They have booked your company to help them tour certain areas of interest of which one of them is shown in the above photograph.

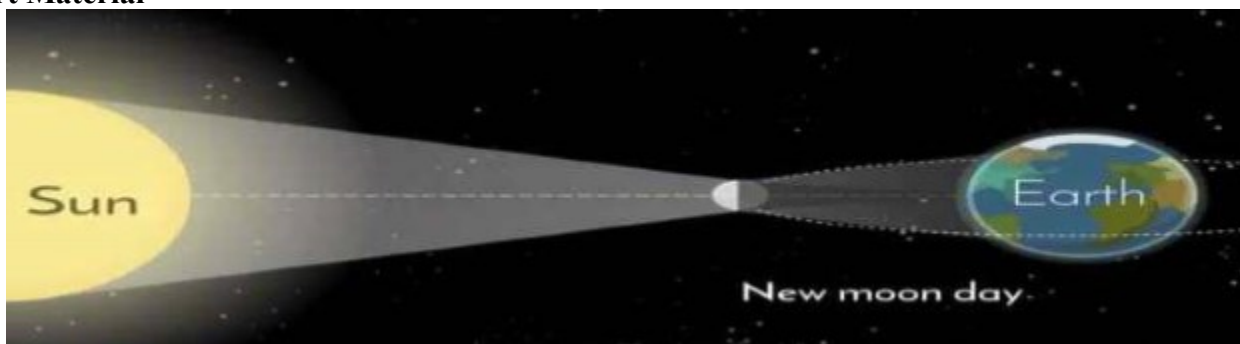
Task

- Draw a landscape sketch of the photograph and on it mark and name features found in the area shown in the photograph.
- Giving reasons from photograph, state the type of photograph shown.
- Describe for the visitors the attractions they will see with evidence from the photograph.
- How do the local benefit from the tourists?

ITEM 3

A total solar eclipse happened on 8th April 2024 had many eulogies. Many local and international media platforms written informing people that it will take almost six days when the world is in total darkness. Such eulogies worried many of African countries because they're backward in terms of technology and emergency handling. However, on the eve of the eclipse, it was observed in North America, Mexico, US and Canada. Here in Uganda people were observing it from the television and other websites. It started at 2:07p.m EDT (Eastern Day light Time) along Mexico's Pacific coast when in Uganda it was 8:00pm EAT (East African standard Time.) Your friend in Canada observed the eclipse from the start to the end. However he doesn't know how it happen and why it was not visible to the rest of the world particularly Africa.

Support Material



Task.

As a geography student, write a letter of about 250-300 words you will send to your friend via email helping him understand this matter well.

ITEM 4

Kaliddubi is a town in a valley along Kampala Busabala Road blessed with streams and swamps like Kaliddubi swamp. Unfortunately, due to the increasing population in the area, people have started encroaching the swamps to obtain land for crop growing to earn a living and also sustain their livelihood. The local leaders have on several occasions advised people to conserve the existing swamps in their areas. Instead of responding positively to the leader's call they resorted to destroy the existing swamps. Recently the heavy prolonged down pour received in the area resulted into destructive floods which destroyed people's homeland, farmlands and properties. Some people living in the area would like to migrate from the above area but have nowhere to go. The local people and leaders have organized a sensitization meeting to handle the above situation.

Task.

- Explain the possible causes of the natural calamity in the above area.
- Make a write-up message that you will deliver in the meeting to help the people living in the area to handle the above situation.

ITEM 5

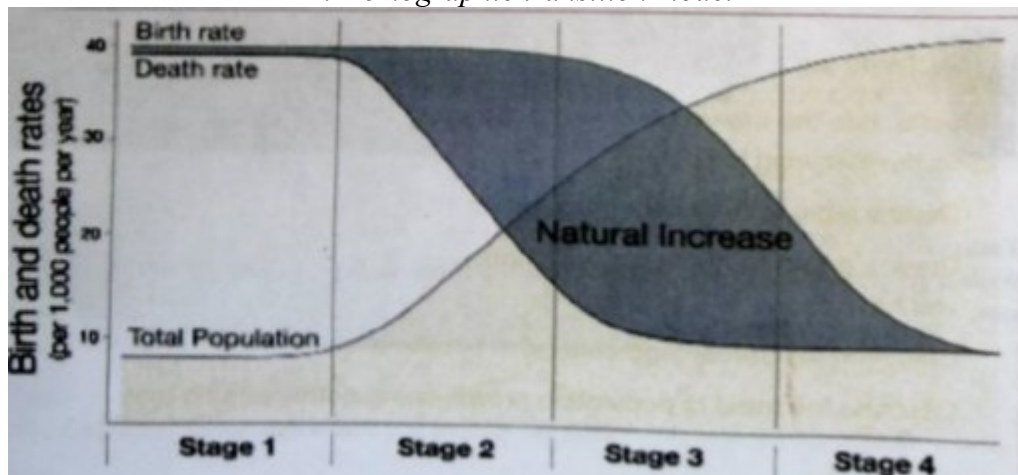
Africa is one of the continents that are experiencing rapid population growth. By the end of 2023 the total population was estimated to be 1,460,481,772 people. To make matters worse the poorest nations are experiencing high population growth rates. These include South Sudan 4.78, Niger 3.66, Burundi 3.59 and Equatorial Guinea 3.36. This trend in population greatly affects the countries efforts towards development and keeps the population in a state of misery. The African Union is appealing to member countries to address the circumstances that lead to the population trends described in the text and the table below

Support Material

A. Table showing African's population between 2019 and 2023

YEAR	POPULATION (MILLIONS)
2019	1327
2020	1360
2021	1393
2022	1426
2023	1460

B. Demographic transition model



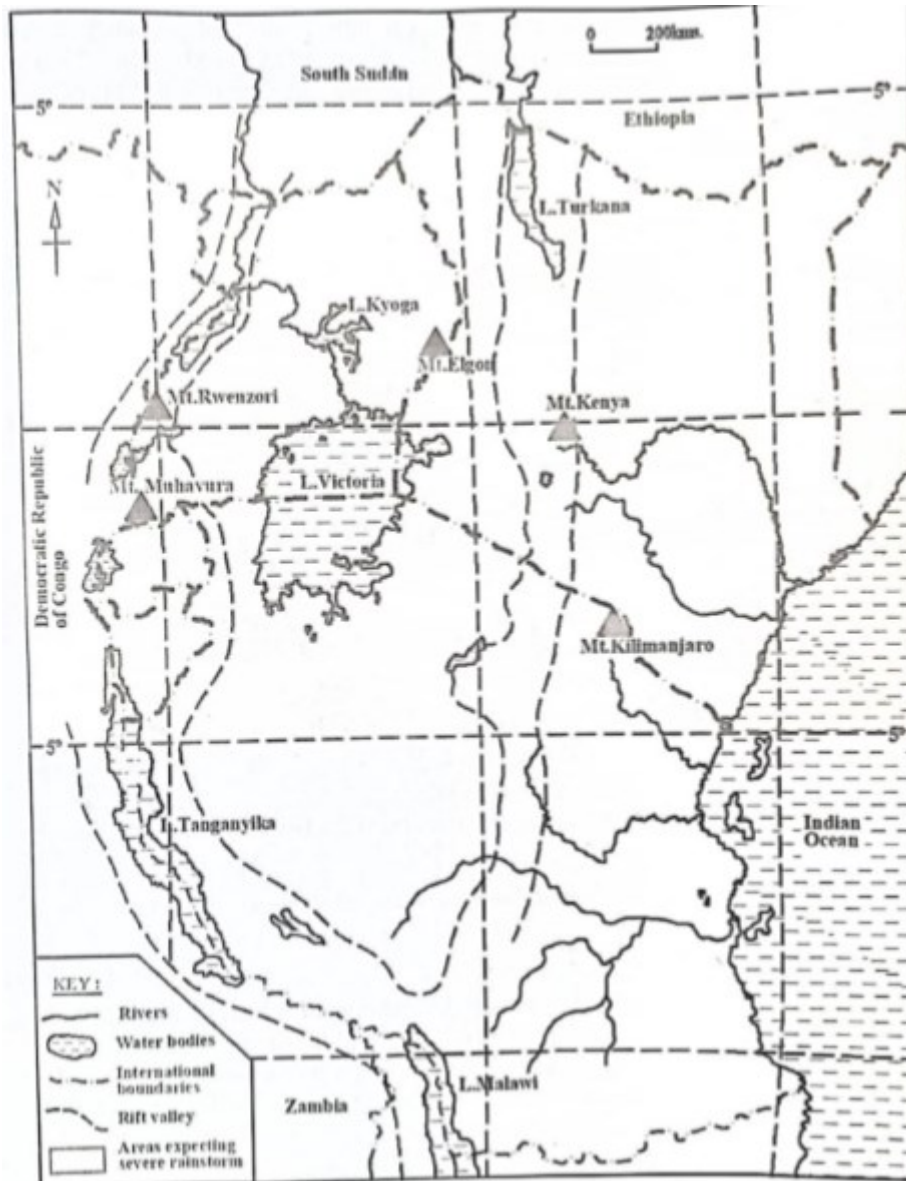
Task.

- Use a suitable statistical method to represent the data in the table above.
- Write a speech you will deliver at the meeting with the authorities in the countries about the facts behind the population trend.

ITEM 6

A severe rain storm is forecasted to hit East Africa between latitudes 5°N and 5°S . It is expected to cause disasters like severe landslides and flooding. The International Federation of the Red Cross and Red Crescent (IFRC) is preparing to sound an early warning to the people living in the area that are most likely to suffer the effects of the disasters. The IFRC has contacted you to provide information that they will use for the early warning. You are provided with a map of East Africa in Fig. 1 to prepare the required information.

Map of east Africa



Task:

From the map:

- Identify the areas of East Africa that are likely to suffer the most severe effects of the expected floods and landslides.
- Recommend to the IFRC the most suitable areas for resettlement of the affected persons.

ITEM 7

According to the population statistics of Africa 2022 revised by United Nations, Africa's population was estimated to be 1.4 billion by 2023 and growing at a rate of 3% per year. At this rate, Africa's population is expected to be 2.5 billion people by 2050. Experts have learned that this will drain resources if nothing is done. The African Union communities have organized an urgent conference to address the concerns of the experts. You have been invited to attend the conference and give an urgent.

Support material

Table showing population from statistics of Africa 2019 to 2023 in billions.

Year	Population
2023	1,460,481,772
2022	1,426,736,305
2021	1,393,676,444
2020	1,360,677,231
2019	1,327,701,163

Source: World diameter – 2022 revised by new vision

Task

- Use a relevant illustration to show the information.
- Prepare a speech of about 250 – 300 words to present at the conference to address the situation.

ITEM 8

East Africa is gifted with a lot of mineral resources which include gold, diamond, iron ore, coal, manganese and others which have attracted many foreign companies to come in the east African countries to extract them and after exported to their countries as shown in the support material below.

Minerals	Export in percentage (%)
Gold	17
PGM	26
Iron ore	20
Coal	18
Diamond	03
Manganese	06
Chrome	02
Other	08

Source: chamber of mines estimate statistics EA (2016)

Task

- Draw a pie chart to represent the above information.
- Explain the benefits of mineral extraction to the local people of east Africa.
- Describe the methods used by the foreigners to extract minerals in the East African countries.



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Uganda Certificate of Lower Secondary Education PHYSICS HOLIDAY WORK 2024 SENIOR THREE

INSTRUCTIONS: Try out all items, Respond to this work during Holiday time, all answers should be written in a new holiday book.

ITEM 1

Muggaga a cattle keeper was rearing his cows in Nagadyonga forest and he come across a piece of a glittering solid. He tried to analyze the shape of the solid and he failed to come up with a clear shape. He picked it and took it home. On reaching there he placed it at the dining table but her wife was not home. His wife was so happy on her return seeing a glittering material and she called her friends to come and see the material. One of the friends said that it is pure gold and told them that they can earn 7 million from their piece of gold. Muggaga and her wife are very happy.

Material	Density ($g\ cm^{-3}$)	Density ($k\ g\ m^{-3}$)
Glass	2.5	2500
Copper	8.9	8900
Gold	19.3	19300

Task:

Help Muggaga's family to prove whether the material they have is pure by writing a set of procedures they can follow on their own to test its purity.

ITEM 2

At 1:30pm in the dining hall, students were surprised that a live coverage was happening somewhere. Learners watched heavy fog-rains and floods being experienced in a certain outside country on an international T.V live channel. To worsen matters, the floods were happening at night and this risked many natives as many of them were ambushed while asleep. Learners wondered how it would be night and heavily raining in an area yet it was day and the Sun was highly shining at that time in their school.

Task:

As a physics learner help the learners clear their queries about;

- Occurrence of the floods in one area yet it was shining in their school at the same time.
- Why it was night in that outside country yet it was day-time in their area?
- How T.V signals broadcast from where the floods were happening reached them.

ITEM 3

A steel and tube industries company limited was contacted by the school to make a number of new items to restock their kitchen. Among the items on the invoice are; saucepan, strainer, saucepan covers (lids), ladles, cups and plates for students. The school did not specify the type of materials these items should be made of and therefore, the procurement officer of the company contacted their raw materials supplier and the following was supplied following the invoice.

- Plain sheets of copper
- Plain sheets of aluminum

- Melamine resin powder
- Clay
- Wood

For the production team to come up with the items requested by the school, they have to subject these raw materials to either heat or force however these materials behave differently under these two factors.

The cateress prepares milk for students' breakfast. She uses an electric heater which operates on a **4350 W** power supply. Some milk is to be kept so that students can take for their evening tea.

Support knowledge.

- Heat capacity of copper is $400 \text{ Jkg}^{-1}\text{K}^{-1}$
- Heat capacity of Milk is $3890 \text{ Jkg}^{-1}\text{K}^{-1}$
- Initial temperature of milk 25°C
- Mass of copper 5 kg
- Mass of milk 80 kg

Task

- As a physics learner, with reason(s) help the production team to select the raw material suitable for each item to be produced.
- Determine how long it will take for Milk to reach 100°C . Assume no heat is lost to the surrounding.
- With reference to a thermos flask, explain how milk is kept hot.

ITEM 4

Your school organizes a science exhibition in which learners showcase some of their achievements in science and physics in particular. Your class is tasked to explain some concepts using only the materials available and the circuit given. two solid electrodes (Zinc and copper), an electrolyte (ammonium chloride jelly) and electrical conductor such as wire. You are required to make a cell from the materials given and use it in the circuits in Figure a and Figure b.

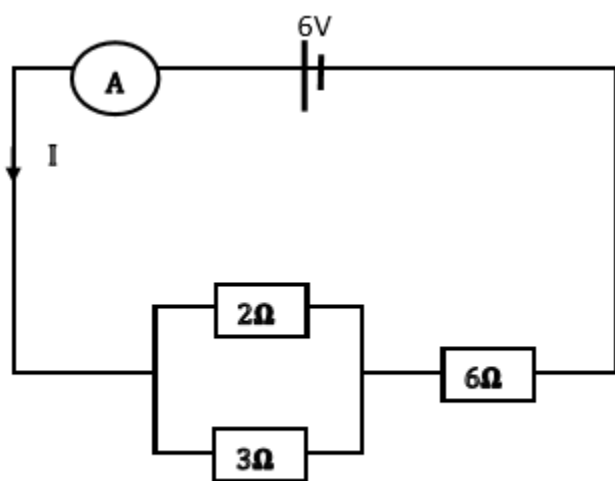


Figure a

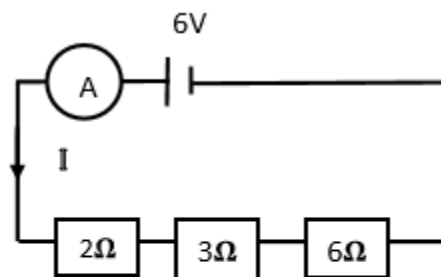


Figure b

Task:

- Take the team that has visited your stall through the steps of making a simple cell which can be used to supply voltage in the circuits above.
- By finding the ammeter reading in each circuit, State which of the circuits in *Figure a* and *Figure b* will produce more current.

c) Suppose all the resistors are replaced by identical bulbs (bulbs of the same ratings) and only the bulb in place of the 3Ω resistor blows out, state which circuit will continue working and give a reason to support your answer.

d) Using the results in (b) above, explain why it's advisable to connect bulbs in parallel than in series.

ITEM 5

An aluminum pan of mass 800g and specific heat capacity of $800 \text{ JKg}^{-1}\text{K}^{-1}$ containing 1.5 kg of ice blocks at -10°C was accidentally put under a tap producing steam at 100°C by a house help. After a few minutes, the ice had all melted and the temperature of the water in the pan was 15°C . The house help was surprised by the disappearance of the ice cubes and was tasked to determine how much steam had bubbled into the saucepan. The house help was tasked to ensure the water does not become warmer without putting it in a refrigerator.

(Hint; Specific Heat Capacity of water = $4200 \text{ JKg}^{-1}\text{K}^{-1}$, Specific Latent Heat of Vaporization = $3.36 \times 10^6 \text{ JKg}^{-1}$.)

Task

Use your knowledge of physics to;

- Determine how much steam was bubbled into the saucepan.
- Explain what happened to the ice blocks.
- Suggest ways in which the water can be kept at that temperature for a long time.

ITEM 6

During an evening down pour, a sharp flash occupied with loud sound were witnessed. As a result the whole village experienced a total blackout. Later it was discovered that a transformer had been damaged by the sharp flash. The village organized a meeting to solicit funds to purchase a new transformer. In attendance was the area Member of Parliament who promised the members that he was to purchase a device which can safeguard the transformer against other damages from such a flash. People wondered how the device can protect a transformer. After two weeks the funds were realized and a committee was selected to go to town and buy the new transformer. The transformer dealer presented to the committee a transformer which supplies 12 V when connected to 240 V mains supply and it takes a current of 1.1 A from the mains when used to light ten 12 V, 24W lamps in parallel. The convinced the buyers that the transformer had an efficiency of at least 96%. They were not sure of how the dealer arrived at the value.

Task

Using knowledge of physics,

- Find out whether the trader was trustworthy when he stated the above value
- Sensitize the community on how the device would safeguard the transformer against such destruction

ITEM 7

One of the most misunderstood branches of physics for many years has been space physics (Astronomy). Some of the examples of such misunderstandings include the following. The Catholic Church at one time thought that other heavenly bodies, including the sun, orbited around the earth, rather than the earth. This was the problem that Catholic hierarchy had with Galileo. For example, the Church tried and arrested Galileo Galilei for supporting Sun-centered view of the universe.

While watching the world cup which took place in Brazil in 2014 at 9pm East African time, the football fans watching the game in East Africa realized that it was still daytime in Brazil, some of them were puzzled by this? While it snows (winter) in most European countries in December around Christmas season, the people in East Africa have never seen any snow fall in East Africa and some of them wondered why it is this way?



Task,

As a learner of physics, write a report to the community on enlightenment about these astronomical events in order to promote deeper understanding of physics in the school and community at large.

ITEM 8

Your brother has just graduated as a senior Doctor and now you are going to the village for the graduation ceremony. You have hired a taxi to take all people who are to attend ceremony. Their luggage as well as all utilities that you are to use while in the village. The taxi driver has loaded the car and now it seems to be full yet more luggage is still there to be loaded. The taxi driver has now to load most of the remaining luggage at the rack (on top of the car)

Task

Advise the taxi driver on how this kind of loading of a car can be of great danger to all of you on the way the graduation party.



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Uganda Certificate of Lower Secondary Education ENGLISH HOLIDAY WORK 2024 SENIOR THREE

INSTRUCTIONS: *Try out all items, Respond to this work during Holiday time, all answers should be written in a new holiday book.*

ITEM 1

Read the text below

Leaders are charged with the responsibility of providing inspiration to their subordinates. Employees will always look up to this. It can come in the form of motivation in different ways as designed by the administration. However, modern day leaders have failed to meet this and it has proved a challenge today. It demotivates the workers and they feel their effort is not appreciated by the system. Inspiring workers will help them to focus on the value of their work and share the vision of team work in a unified way and the result translates into success for the company or institution.

A key part of a leader's talent and employee development. It's important to search out the potential in your team members and encourage their growth through organizing workshops, seminars and allowing for refresher courses. When one's leadership cannot foster staff or workers develop it faces a lot of challenges. Even when this is supposed to be done, modern leaders have to some extent failed to implement this. They have failed to identify their worker's interests and push them towards attaining the skills for the good of the company.

It is incumbent upon leaders to cause change in their institutions, and change for the better. However, they have sometimes failed to implement this due to factors either within or beyond their means. Today, leaders see causing change as a big shift that would give their workers opportunities to progress to other levels and thereby dropping the company. They decide to keep them in the same environment and conditions without minding their issues. Change seems a scary with leaders as it creates some sense of uncertainty. They forget that how we work is changing like never before and employees will look to leadership for guidance and reassurance. It's important to validate the feelings of your team and help them to feel their fears are heard. Helping them to find the positives of the change can lower resistance towards it. Workplace conflict can be extremely detrimental when handled poorly, causing stress to almost half of employees. There will be times as a leader when you have to manage conflict between team members or between yourself and an employee. Conflict can feel uncomfortable but you need to solve it before it upsets the team.

If the conflict is between two employees, try and facilitate them in solving the issue themselves by encouraging listening and compromise. If one of your employees disagrees with you, make sure you consider their point of view, and don't be afraid to change your approach if theirs is better. Handling different perspectives and conflicts among employees is a big leadership challenge today. Given the diversity of employees within the workplace, it's unsurprisingly that friction arises from individuals' differing experiences, ideas, and perspectives. The challenge for leaders is creating space for those ideas to be shared and ensuring that conflicting ideas are channeled into a productive discussion that allows for growth and shared understanding. It's common, especially for new leaders, to lack confidence or feel like they don't deserve to be in a leadership position. Dealing with imposter syndrome is a challenge most leaders encounter in executing their duties. There are a number of different types of imposter syndrome. You might question your own skills or judgment which could lead to indecisiveness. Or you might feel like you have to tackle everything alone which could prevent you from asking for the help you need. To squash imposter syndrome, look for evidence of your

capability in feedback from your line manager or peers. You were given the role for a reason! And continue to develop your own skills in areas you find most difficult.

In leadership managing and keeping a united team is key to steering a reasonable management. Challenges are faced when the leader is new to the team, they find it difficult to quickly adopt the strategies and the dynamics and work well with the team. It may become tricky for leaders to fit in a system yet they have to auger leadership. Leaders also encounter communication challenges in leadership. Keeping everyone on the same page. In a fast-paced, changing environment can be tough for leaders. It's important to keep communication frequent and open so that everyone is on the same page. Developing a culture of feedback within a team is an essential way to ensure they can really progress together and individually. Staying honest is a leadership virtue, but most leaders today have failed to keep it. As a leader, you'll sometimes have to communicate difficult things to your team. Things that may cause a lot of hiccups amongst employees. This has always been a challenge with leaders who do not want to open and say the truth. Sometimes they compromise honesty and be silenced by their inferiors. It's important to share tough news or information as clearly and as honestly as possible. Prepare what you're going to say and make sure there's a chance for you to answer any questions.

There will be times when you have to make hard decisions as a leader. It might mean making an unpopular choice or taking an action that upsets someone but is best for the business overall. In those moments, you can feel alone and unprepared for the task ahead. Take a deep breath and remember that doing the right thing doesn't always mean doing the easy thing. Take bold steps and make painful and meaningful decisions for the good of the company. Managing company resources can be especially tricky if you've got a great team that everyone wants to work with as a leader. There is therefore need to create a clear workload so that you know what requests for support you can accommodate and what you cannot. Prioritize work coming in against the core purpose of your team so you make sure you say yes to the things that create the most value, void of this may plug you into a leadership crisis. Seeking feeding from employees is yet another challenge especially those who head big companies. This may keep the workers at parallel with the company cores and in the process things may fall apart. Things won't always go to plan and staying positive in the face of disappointment is a real challenge for leaders. But it's important to move on, especially if the team is also feeling down and looking to you for motivation. Acknowledge the disappointment and identify what you can learn from it. Then use it as fuel to do better next time.

Leading others can be challenging. There may well be times when you feel daunted or overwhelmed by the responsibility. You'll need to be able to keep yourself motivated, deal with the stress that comes with uncertainty, and avoid emotional exhaustion and burnout. As a leader, make sure you take the time to really switch off from work. Try to focus on maintaining work-life balance. Tempting though it is, don't read and reply to emails and messages outside work hours. It's exhausting for you and sets an expectation for your team to also work when they shouldn't. At work, try prioritizing a break in the day to eat and move. Self-care is important if one is to overcome leadership challenges. Keep a bottle of water on your desk so you stay hydrated and try and take a screen break every hour or so to give your eyes (and brain!) a chance to rest. For a leader, getting clear on your role is very important in as far as overcoming leadership hurdles is concerned. Make sure you know exactly what you and your team are responsible for, and what you're not! This really helps with managing resources and making sure you don't take on too much work and stretch yourself, and your team, too thinly. Really understanding your role allows you to focus on the things that only you can do and delegate tasks that others can tackle amongst the team. Delegating shows you trust your team to get things done and can help develop their skills. And it frees up your time to concentrate on where you can add the most value.

There are lots of different types of leaders, and lead. Being authentic in your roles wins nothing but respect and honor from the workers and helps you win battles of leadership. Don't feel you have to fit into a certain mold. Develop your leadership skills and leadership style by trying different approaches to situations but don't try to be something you're not. Part of effective communication is being able to express yourself authentically, so keep that in mind. It is important as a leader to find support in executing your roles. We all need help at times, and sometimes, leadership can feel lonely. Make sure you get the support you need so you can do the best job possible. As a leader, speak to your line manager or see whether a coach or mentor can help you develop your skills. Coaching and mentoring can be extremely helpful for both new and experienced leaders. Coaching creates space to think things through and finding a mentor whose experience you can lean on

can also be helpful to overcome challenges of leadership. Investing in making the company culture is key. It can only be possible if you as a leader uses the feedback from the employees well and not for the sake. It will help the workers get accommodated feeling that their views matter a lot. Learn to set clear expectations and always communicate often. Keeping employees in the know is key to unlocking a lot of leadership challenges. Effective leadership does not happen overnight. It takes time and experience to develop the hard and soft skills needed to become a better leader. That said, professional development programs can add structure to the learning process. Through this structure you'll set goals, work through difficult scenarios, and delve deeper into the root causes of many leadership challenges.

Task:

As the chairperson of the school council at your school, address the prefects on the challenges of modern-day leadership and how they can be overcome as brought out in the passage. Use about 120 words.

ITEM 2

Read the text below;

Poverty is the state of or fact of being in dire need. People are poor if they lack enough income and resources to live adequately by the accepted living standards of their community. Definitions of poverty vary from country to country, just as living standards do, and it is difficult to give precise figures. Standards may vary greatly according to time and place. Many people who live in Western industrialized societies, for example, believe that they must have a car to live well.

They would consider themselves poor if they could not afford to buy one. Yet many people who live in other countries regard a car as a luxury. They would not consider the lack of a car as a sign of poverty. People who lived in industrialized nations when the motor car was first introduced, did not at that time consider cars necessary for a decent standard of living.

At least over a billion people, or a fifth of the world's population, were so poor in the late 1980's that their health and lives were in danger. What is certain is that the most widespread and severe poverty occurs in nations with a few or underdeveloped resources. These nations are usually called the developing nations or the Third World. More than 100 countries come into the category of developing nations. They are former colonies of industrial nations, and one of the causes of their present poverty is their colonial past. The powers that colonized them, deprived them of much of their wealth.

Currently, debt is a major cause of individual poverty, often made worse by the loss of a job or means of livelihood. In a country like India, debt bondage keeps very many families in poverty. The debt can often never be repaid. The debtor must work for the creditor and almost becomes the creditor's slave. The debt bondage may continue in a family for generations, with sons inheriting the debt from their fathers.

When a community suffers economic reverses, war, crop failure, or disease epidemic, poverty can affect whole classes and communities. Any minority or group singled out for discrimination, is usually unable to take advantage of educational or employment opportunities open to others because of prejudice.

Natural disasters cause widespread poverty. Ireland's potato famine in the mid-1840's led to the death of hundreds of thousands. Many left the country to escape starvation. During the 1980's, drought and war killed hundreds of thousands in Africa, and, in 1991, a cyclone devastated the island communities of Bangladesh. All these disasters plunged millions of survivors into distress.

Poverty causes suffering among millions of people. Homelessness is one such obvious sign of poverty. Many low-income families live in city slums or rural areas that do not provide the basic needs such as food, shelter and clothing. The only work available may offer low uncertain income and little security. Many poor people work in dangerous or unhealthy conditions.

People who live in poverty are less likely to eat the foods they need to stay healthy or to receive good medical care when they are ill. Their children may not have enough to eat. The very poor are more prone to diseases and die at younger ages. Poverty brings despair, anger or lack of interest in anything except one's own worries. Financial, emotional and medical problems strain family ties. The poor have little influence in the community.

Businesses are interested more in people who buy their goods and services. The poor have limited political power. Many of the poor believe that no political candidate can help them and do not participate in elections.

Studies show that large numbers of children born in low-income families remain poor all their lives. Many come to feel as helpless as their parents. In some parts of the world, poor people value large families as a source of family security and labor.

Underprivileged children may suffer from lack of nourishment for healthy growth during their important early years. They can seldom expect to attend good schools that will educate them for a full life.

(Adapted from: "The World Book Encyclopedia", P Volume 15, 1992)

Task:

You are a social worker in a community where poverty is a significant issue. Your supervisor asks you to brief her on the effects of poverty on society. Brief her on the effects of poverty in about 120 words, based on your understanding of the issue from the passage above.

ITEM 3

Read the text below and respond to the given tasks

The day finally came and Nasula carried her only sack of beans to the market to raise school fees for her only daughter, Sula. In the open space before her, where beans and other produce were sold in bulk, people diligently occupied themselves, standing their bags in the best positions, opening and adjusting them for improvement.

The first person to stop by her bag of beans was a busy-looking young woman in a dark suit, who looked as if she worked in a good office. She asked the price and was told one hundred and twenty thousand kwacha. The woman then wrote something down on a piece of paper and walked away quickly but gracefully. More people came and went, appreciating the beans as being good, but not buying them.

The sky was clear and Nasula was beginning to feel hot, bored and tired. A man with a homburg hat which added to his stature, and a scent which smelt expensive, stood before Nasula. Well-built and in his late thirties, the man had well-cropped brown hair and broad shoulders. He wore an immaculate checked suit, dark shoes, a white shirt and a red tie.

Although there was something shrewd and not transparent about his long, scar-marked face and bright eyes, the man was impressive, taken all together.

'I'll give you one hundred and thirty thousand kwacha, Mama, for this bag,' he said. 'These are good beans.' His polished accent and the rather scented odour of his body seemed to intimidate Nasula. What do you say, Mama?

She looked down at her bag of beans which was about to leave her, a breeze of relief and happiness rising inside her. The man offered her more than what other interested buyers had wanted to offer her.

'Did you say one thirty?' she asked the man, just to be sure she had heard him correctly.

'Correct, Mama.'

'You can take the bag!'

'Close it up, Mama. I will find some boys to come and lift it into the car for me.'

Nasula started sewing up the opening to the bag. As she finished, the man who had offered to buy the bag arrived with three young men to lift the bag into the car. Nasula stepped forward and helped the young men to carry the bag to the car. The man who was buying the beans walked ahead of them.

The car was packed by the edge of the market, along the road that marked the Southern border. It was a bright yellow car with a black line on its sides. It was a beautiful machine, as immaculate as its owner. Nasula's eyes darted from one to the other, as the man opened his boot and she and the helpers threw the bag of beans inside.

When he had closed and locked the boot, the man who was buying the bag of beans fished out a five hundred kwacha note and gave it to one of the three young men, saying that he and his friends would know how to share the money.

'Come, Mama, let us go,' he said to Nasula, and started walking back in the direction from which they had come. 'I want to buy some more of these beans.' Still walking, he took out a bunch of notes and counted them, making Nasula's heart throb with anxiety. 'Six hundred thousand kwacha. I must buy three more bags and hire a van to take them home,' he said to himself, loudly enough for Nasula to hear. But then, he did not give Nasula her share of his wealth. He put everything back in his pocket and walked on.

Reaching the spot where Nasula had been selling her beans, he told her to wait there a bit longer.

'Let me see if I can find some more beans like yours,' he said, walking towards another part of the market.

Nasula waited and waited but the man did not come. She became impatient and decided to follow him. She followed the passage through which he had walked, but there was no sign of him. She walked down every passage, where produce was sold in bulk, searching for him, but in vain. She decided to go and wait for him by his car. The yellow car had gone.

The nearby vendors confirmed her fears. It was clear that the man had cheated her out of her bag of beans.

(Adapted from: *A Cowrie of Hope* by Binwell Sinyangwe)

Respond appropriately to each of the following tasks according to the text:

- (a) People diligently occupied themselves, standing their bags in the best positions, opening and adjusting them for improvement. Explain why you think the vendors were doing this.
- (b) The woman then wrote something down on a piece of paper and walked away quickly but gracefully. (Rewrite this sentence, beginning with a past participle phrase.)
- (c) Different people have different personalities. In reference to the text above, what type of person is the man who took Nasula's bag of beans?
- (d) In life, we learn from our own experiences or those of others. What can one learn from the text above?
- (e) People's actions and behaviour affect us differently. Describe the feelings the text brings in you.
- (f) If you were the leader of the vendors in the market where Nasula lost her bag of beans, what measures would you put in place to avoid such incidences?

ITEM 4

Read the text below;

SUGAR AND HER GANG

Every learner wondered why Sugar did not bother to revise her books yet the examinations were about to begin. Sugar was a pretty girl with an angelic voice. Her beauty was elevated by her dimples, her smile and her gorgeous eyes. She was the heartbeat of every young man in her school. Some boys would scrape their desks clean in the hope that she would sit with them. However to their frustration she never gave a hoot.

Sugar was very attractive and when she moved everybody turned their head in admiration. She was as graceful as a gazelle. She walked like a pageant queen, with a well calculated cat walk.

But did Sugar's overflowing beauty match her academic success? One would wonder how a girl who spent a lot of time caring for her beauty and missing lessons and notes, managed to beat her classmates at academics. If she did not come first, a certain teacher Black sheep would contest the results vehemently. There was something fishy about Sugar and black sheep. But it was a top secret. Black sheep was also Sugar's class teacher. As such Black sheep had the privilege to alter the marks in sugar's favor since he was in charge of making the report cards. He would then go through the scripts with Sugar and her gang who knew about this fishy business. This way sugar and her friends, who protected the unacceptable relationship, would benefit from the scheme and pass highly as well.

"I will give you more good things. I will ensure that in the forthcoming election for prefects, your name appears unchallenged for the head prefect post." Black sheep assured Sugar, adding, "You can have any four of friends of your choice to also take up prefectorial posts. I'll ensure they go through!". "We can stuff some notes in our skirts for all the examinations that our friend, Black sheep will invigilate," one of Sugar's confidants suggested.

Black sheep's luck soon ran out when he made Sugar pregnant. The doctor assured the girl that she had a terrible condition and that the only way she could survive was to bear the consequences of the pregnancy and give birth. She, who was once the centre of attraction, was now pale and lean. The senior woman soon knew about her condition and informed the school disciplinary committee. Black sheep was proven guilty and unprofessional in court. He was imprisoned and his teaching license cancelled.

Questions

- (a) Why was Sugar the center of attraction at her school?
- (b) Was Sugar academically gifted? How do you know?

- (c) Explain how Sugar and her gang would always manage to excel in their examinations
 - (d) How did Sugar misuse her looks to destroy her life and future?
 - (e) Do you think the judge was fair to sentence Black sheep and leave Sugar and her gang scot free? Explain your view
 - (f) Are there learners in your school who cheat exams? What is usually done to them?
 - (g) What should the government do to candidates who cheat national exams?
 - (h) Supposing you were sitting your national exams and an exam leaked. Would you read it to cheat exams? Give reasons
 - (i) Describe ways through which learners cheat exams
10. Explain how cheating of exams in school can lead to corrupt and incompetent citizens in future.

ITEM 5

Read the passage below.

THE POWER OF SELF-ACCEPTANCE

Your identity is a unique blend of experiences, characteristics, and traits that make you who you are. It is a complex and multifaceted aspect of your being, shaped by a variety of factors, including your culture, background, and experiences. Embracing your individuality is essential, as it is a reflection of your strengths and resilience.

Your culture, background, and experiences have shaped you into a diverse and rich person, making you a source of pride and self-expression. Your identity connects you with others who share similar backgrounds and experiences, and it is a testament to your ability to adapt and grow. It is a source of comfort, security, and belonging, and it helps you navigate the world with purpose and direction.

Your identity is a reflection of your values, beliefs, and principles, and it is a unique perspective that can contribute to the world. It is a source of creativity, inspiration, and innovation, and it helps you navigate the world with purpose and direction. Your passions, interests, and talents are all part of your identity, and they are essential to living a fulfilling and meaningful life.

"I'm proud of my heritage," says Maria, a community leader. "My identity is a source of strength and inspiration for me, and it helps me connect with others in my community. I feel like I can make a difference because of who I am and where I come from." Maria's words highlight the importance of embracing our identities and using them to make a positive impact in the world.

Your identity is dynamic and evolving, and it is a reflection of your courage, perseverance, and determination. It brings you joy, happiness, and fulfillment, and it helps you find your place in the world and make a positive impact. Your identity is a precious gift that deserves to be celebrated and appreciated. By embracing your unique identity, you can unlock your full potential and share your gifts with the world. In addition, your identity is not fixed, and it can change and grow over time. It is shaped by your experiences, relationships, and choices, and it can evolve in response to new challenges and opportunities. Embracing this growth and evolution is essential to living a fulfilling and meaningful life.

Moreover, your identity is not defined by any one aspect of yourself. You are a complex and multifaceted person, and your identity encompasses many different traits, experiences, and characteristics. Don't try to fit yourself into a narrow mold or label – instead, embrace your uniqueness and celebrate your individuality.

By embracing your unique identity, you can live a life that is true to who you are. You can pursue your passions, build meaningful relationships, and make a positive impact in the world. You can be a force for change and a source of inspiration for others. So, take the time to explore your identity, and discover the incredible person you are meant to be!

(An essay by Mr. Obuga John written and edited on 21st July, 2024)

Question;

You are a life coach, and your client is struggling to find their place in the world because he doesn't appreciate himself. He is feeling lost, and uncertain about his identity. You want to share the main ideas from the passage with him. Inform him the reasons why one should appreciate their identity in not more than 120 words.

ITEM 6

Chin Wang, a vibrant and dedicated member of the Kikajjo community, has passed away at a young age. As the chairperson of the village and a close friend of him, you have been asked to deliver at his funeral service. Write what you would present to celebrate his life, highlighting his achievements, qualities, and impact on the community. Include personal memories and anecdotes that showcase his character and legacy.

ITEM 7.

A market visit is a wonderful experience beyond just shopping. Even though markets are different in nature, whoever goes to a market has a fascinating story to tell. Narrate what happened in a market you recently visited.

ITEM 8.

You recently attended an amazing and fun-filled marriage ceremony. At the most exciting part of the celebration, another woman showed up claiming to be pregnant for the groom. Give an account of what happened.

ITEM 9

You have collected and read at least two articles or stories in a newspaper or magazine about parents and their children expressing opinions of what parents expect of their children at home. It also presents the responsibilities of both boys and girls at home and in the community. Thus, you realize that you have been mistreated in one way or the other. Write to the family department affairs of your local police complaining about the mistreatment you have faced at home.



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Uganda Certificate of Lower Secondary Education MATHEMATICS HOLIDAY WORK 2024 SENIOR THREE

INSTRUCTIONS: Try out all items, Respond to this work during Holiday time, all answers should be written in a new holiday book.

ITEM 1

Two friends, Sarah and Moses started a poultry project to which they contributed shs 4000, 000/= and shs 6,000,000/= respectively.

They agreed share the profit in the ratio of their contributions and the project started with 2000 birds. After selling all the birds, they made a profit of 1,500,000/=. They re-invested in the project and the number of birds increased to 2,500. However, Moses was not sure the amount he re-invested as well as the percentage increase in the number of birds. On 1st march 2024, they brought feeds and also balanced their books of accounts. On that very day, they had a meeting in which they agreed to buy feeds after every seven days and balance their books of accounts after every 14 days. However, Sarah wondered if there would be another date in the future on which they would buy feeds and balance their books of accounts on the same day.

Task

- (a) How much of the profit did Moses re-invest in the business?
- (b) What was the percentage increase in the number of birds?
- (c) On what date in the future would they buy the feeds and also balance their books of accounts the same day?

ITEM 2

Mr. Chemonges a Tailor operates a small business by making Dresses and Shirts.

After being trained by a local NGO on how to improve small businesses and earn more he started to keep records about his daily operations ensuring minimum costs of production. The production includes both shirts and dresses and should produce not more than 14 altogether.

In one week, he makes at least 4 dresses, and not more than 7 shirts. The number of shirt he makes is more than two – thirds of the number of dresses.

The profit he makes on one dress is UGX. 10,000 and the profit on a shirt is UGX. 6,000.

TASK:

- (a) i) Express the conditions for producing shirts and dresses as inequalities.
ii) Show the feasible region of the conditions on the Cartesian plane.
- (b) i) Help Mr. Chemonges to determine the smallest number of dresses and shirts he makes in one week to minimize the cost of production.
ii) Find the largest profit he can make in one week.

ITEM 3

The restaurant owner has been operating in an open space where the customers have been complaining about the sunshine and rain disturbing them. He makes an order of three similar triangular table surfaces. Each table should be having a hole in its center to fix an umbrella which covers the vertices of the table surface. The tables are to be of sides 2metres with equal interior angles of 60° .

The carpenter charges Ugx .200, 000 per table made. He (carpenter) gives a discount of 5% to a person who orders with cash and denies discounts to those who don't order with cash.

The restaurant owner needs the tables made within 48 hours. Therefore, the carpenter started making the tables on Monday at 8:00 am. The carpenter starts his work at 8:00 am and stops at 5:00 pm and has 1 hour for break from 1:00 pm to 2:00 pm. He needs 5 hours to work on each table.

Task:

- Help the carpenter to come up with the designs of the table that the restaurant owner needs.
- How much will the restaurant owner pay for the three tables in case he orders with cash?
- At what time shall the carpenter finish making the tables, will the carpenter meet the demands of the restaurant owner of making tables with the 48 hours?
- Advise the restaurant owner to determine the minimum radius of an umbrella that covers the table.

ITEM 4

A brick manufacturing industry found in eastern Uganda has run shortage of workers in the factory due to the increased work at the station, and the manager intends to recruit a good number of people to work in the factory and the information given each. Section and the information was given in the table below

52	36	76	51	62	67
45	49	54	58	53	74
50	80	70	57	64	64
84	71	85	72	78	43
84	72	69	49	66	42

Task.

- Giving a reason based on the computation using the collected data, Determine the suitable number of employees which should be added in the factory
- The manager wishes to know the number of officials which prefer the employees in each sector to be greater than 60, help him to estimate the number

ITEM 5

In the certain shop found in Mbale city found in eastern Uganda sells the TV in a set at 920,000, the manager said that it can be bought in part i.e. deposit of 60% of the cash price and their payment of equal installment for 5 months/ given that the cash price of the TV set is lower than the hire purchase value by 20%, if mutunga, is a worker in the shop who pays the tax of SH 945600 annually and below is the tax structure of all workers in the shop

Each employee is entitled to follow allowances

Taxable income sh	rate
100,000-250,000	8
250,001-400,000	15
400,001-650,000	20
650,000-900,000	26
900,000 above	35

Transport	=	2000 per day
Electricity	=	40,000 per month
Water	=	258,000 every year
Lunch	=	10,000 per day
Insurance	=	28500 per month

Child allowance for only 3 children at the following rates

0-5 years 40,000 each child

6-12 years 25,000 each child

13-15 years 10,000 each child

If Mutunga has 5 children of which 2 are 17 and 18 years, the other children are 21 years

Task

- (a). Using your mathematics knowledge to determine the percentage of money which would be saved by buying the Tv set on cash terms other than hire purchase terms
- (b). Guide Mutunga to know his annual net income and the taxable incomes

ITEM 6

Your brother wants to design a children's playground. The playground will have a triangular garden and a circular fence around the garden. The two sides of the triangular garden will measure 50m and 70m, and the angle between them will be 45° .

Your brother also wants to construct a circular fence around the garden such that the circular fence perfectly touches the three vertices of the triangular garden.

Your brother needs help in identifying the type of triangle represented by the triangular garden, coming up with an accurate design of the playground.

Task:

Help your brother to;

- (a) Construct an accurate design of the children's playground.
- (b) Identify the type of triangle represented by the triangular garden and give a reason for your answer.

ITEM 7

A family decides to paint the inner walls of its living room for New Year celebrations with a budget of Shs 400,000. The room is 5m long, 4m wide and 3m high. The room has two painted doors in the middle of the walls opposite to each other. Each door is 2m high and 0.75m wide. The room has one painted window in one of the side walls which is 1m square. A painter charges Shs 800 per square meter painted and for every 10m square wall painted fully, consumes a 4 litre tin paint which he sells at Shs 70,000.

Task:

As a mathematics student;

- (a) Establish computations to find out if the budgeted money could be enough for this work.
- (b) If a painter offers a discount of 10% on labour and 5% on every litre of paint. How much money shall the family save?

ITEM 8

Opio and Odong are twins. They used their first salary to buy their first piece land with corner stones $A_1 (0, 0)$ $A_2 (10, 0)$ $A_3 (10, 40)$ $A_4 (0, 40)$ and these corner stones were named in meters.

They have been using this land together. Upon getting engaged to marry, they want to separate their families. They decided to acquire another piece of land of the same size in the same location from the other side of the road. There are two roads passing through $(20, 50)$ and they are parallel to this piece of land. Two pieces of land on the other two sides of the roads have been offered for sale from which they are to choose one. The same size of the road reserve (space between the piece of land and the road) is left on either sides of the road.

The local government of the area requires that every after five years of acquisition of the land one has to increase or reduce the piece of land as an indication of development and unity. To increase land, one can acquire it from a neighbour making the neighbour to reduce his/her piece out of agreement and at a cost.

The one who remained on the original piece of land wishes to construct a house on half of this piece of land before the end of this year. The number of bricks needed for the whole house depends on the area of the space available for the house construction.

Task:

- a) Using cornerstones, display the pieces of land from which these twins can choose.
- b) Display how the first piece of land will look like if the owner doubles it in reference to cornerstone A_1 without entering the road reserve while keeping the same shape of the land.

c) They have got the supplier of bricks and they would like to determine the number of bricks. Help them establish the area of the space available for the house which will help them estimate the number of bricks for the house.

ITEM 9

A gym is thinking about adding more cardio equipment for its members. The gym manager surveyed a sample of 60 members and asked which equipment they used in the previous month. He considered three types of equipment, treadmills (T), stair masters (S) and dumb bells (D). The manager would therefore come up with a decision to purchase more equipment if the chance of a member who prefers only one equipment exceeds 0.10. 15 members used treadmills, 30 used stair masters, 19 used dumb bells, 8 used tread mills and stair masters, 12 used tread mills and dumb bells, 7 used stair masters and dumb bells while 5 used all the three equipment.

Task:

- (a) Determine the number of members that did not use any of the equipment.
- (b) Calculate the probability of a member chosen at random used at least one of the three equipment.
- (c) Advise the manager with a reason based on calculation, whether to come up with decision on which equipment would be purchased more.



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Uganda Certificate of Lower Secondary Education CRE HOLIDAY WORK 2024 SENIOR THREE

INSTRUCTIONS: *Try out all items, Respond to this work during Holiday time, all answers should be written in a new holiday book.*

Item 1

Where do all the fights and quarrels among you come from? They come from your desires for pleasure, which are constantly fighting within you. You want things but you cannot have them so you are ready to kill, you strongly desire things but you cannot get them, so you quarrel and fight, you do not have what you want because you do not ask God for it. And when you ask, you do not receive it, because your motives are bad, you ask for things to use for your own pleasures. (James4:1-3).

Task;

- (a) How can the above text help Christians to strengthen their faith in God?
- (b) How are the above teachings in Task (a) similar to those of Islam?

Item2

Dr. Cook is a man with a wife and four daughters. He has regulations his family members are expected to follow. He buys food but all the delicious foods are enjoyed by the male members, example chicken, eggs and fish. The females all they can do is to do the cooking. When meat is cooked, he is the one to serve the females. When he gets annoyed, he canes and slaps her for any small mistake done. The family members are not happy but his wife is ready to continue with her marriage.

Task;

- (a) Explain the Bible teaching that can bring harmony in the family talked about in the scenario.
- (b) How is the Bible teaching above different from African traditional society ways of living in a family?

Item 3

“You shepherds of Israel! You take care of yourselves, but never attend the sheep. You drink milk, wear clothes made from the wool, kill and eat the finest sheep. You have not taken care of the weak ones, healed those that are sick, bandaged those that are hurt, looked for those that were lost. Instead you treated them cruelly.....”(Ezekiel34)

Task;

- (a) With reference to the above text, how should religious leaders treat their flock / followers?
- (b) Explain the lessons contemporary political leaders can learn from Task (a) on how to treat the people they lead.

Item4

Mr. Magna after completing his studies got a good job as a bank manager. Life has become very simple and happy for him since he earns good salary. Mr. Magna sleeps in bars drinking and buying alcohol for friends, he buys prostitutes and sleeps with them. Recently, he met a friend who advised him to join Christianity and spend the rest of his life as a Christian.

Task;

Advise Mr. Magna on how to spend his money in both a Christian and contemporary world.



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Uganda Certificate of Lower Secondary Education ENTREPRENEURSHIP EDUCATION HOLIDAY WORK 2024 SENIOR THREE

INSTRUCTIONS: Try out all items, Respond to this work during Holiday time, all answers should be written in a new holiday book.

Item 1

Afande Kasingye is a retired police officer who lives in Ntungamo District, Western Uganda. Before his retirement, he established Namara farm on his 20 acres of land he inherited from his late father. On this farm he grew mangoes on a large scale hoping that one day it will cater for his retirement. Recently it was a harvest season and all the mangoes were ready for consumption. However, he is still confused on what to do because the mangoes are very many and he feels he needs to do more than just selling the mangoes. Afande Kasingye has always dreamt of establishing a juice processing factory named “Kasingye Juice” in his home town and he feels this is the right time to do so. He also saved Shs 50,000,000 and would wish to seek for more funds in order to raise startup capital.

Support material:



Task:

- Advise Afande Kasingye on the other sources of Business startup finance that he can explore except his personal savings.
- Draft an Analysis of the projected needs for producing mango juice as proposed by Afande Kasingye.
- Advise Afande on how best the people of Ntungamo and other parts of the country can get to know about juice.

Item 2

Traders in Kampala and surrounding districts recently closed their shops as they were expressing their dissatisfaction with the way VAT is collected using the electronic Fiscal Receipting and Invoicing Support (EFRIS) and the other heavy taxes imposed on them.

The traders claim this system is very expensive and they also have other taxes they pay which increases on the burden they already have. They also claim the penalties charged for non-compliance are too hefty.

Support Material:



Task:

- What are the merits of using Electronic Systems to collect taxes?
- What measures should the Government undertake to avoid such instances of traders striking over taxes and ensure tax compliance?
- Except VAT, mention any other taxes paid by traders and employees in Uganda.

Item 3

Osmosis is an importer of new cars from Japan. He also owns a car bond from which he sells the imported cars in Nakawa Kampala Uganda. It is always a requirement for the imported cars to be insured on transit and Osmosis has to cover this cost before the cars are shipped into the country.

Support material:



Task:

- How does Osmosis benefit from this type of trade?
- Describe the documents Osmosis uses while carryout out this type of business.
- Why is it important to insure imports and exports?

Item 4

During the S.4 first term holiday 2024, you were temporarily employed as a cashier by your parents in their supermarket which is located in Mukono Town known as JK Supermarket since the cashier had gone for further studies. On starting work you were availed with the following records for the previous month of April 2024.

April 2024

- 1st Commenced business with cash in hand Shs 5,540,000 and cash at bank Shs. 4,680,000.
- 2nd Bought goods by cheque Shs 1,160,000.
- 3rd Sold goods and received cash Shs 2,480,000.
- 4th Took cash from the business for home use Shs 240,000.
- 8th Withdrew Shs 300,000 from the bank for business use.
- 11th Paid rent by cheque Shs 1,500,000.
- 12th Banked cash Shs. 2,400,000.
- 15th Cashed a cheque Shs. 490,000.
- 16th Received cash from Alex Shs. 3,500,000.
- 18th Sold goods Shs. 900,000 and received a cheque.
- 19th Incoming invoice from Isaac Shs 920,000.
- 20th Outgoing invoice to Moses Shs. 490,000.
- 21st Credit sales to JK Traders Shs 1,200,000.

22nd Bought goods on credit from J.P Suppliers worth Shs 5,500,000.

23rd Sold goods on credit to Samuel Shs 410,000.

28th Cash sales paid directly into the bank Shs 1,040,000.

30th Paid salaries Shs 3,000,000 by cheque.

Task:

Record the above information in the necessary subsidiary books of accounts for the month of April 2024.

Item 5

Nalukenge Traders has temporarily appointed you to help them prepare necessary financial statements using the Trial Balance below as at 31st/12/2023.

Details	Amount (Shs)	Amount (Shs)
Inventory (01/01/2023)	1,200,000	
Purchases/Sales	72,000,000	130,000,000
Returns	10,000,000	1,500,000
Advertising	4,900,000	
Premises	13,000,000	
Capital		103,200,000
Carriages	3,000,000	
Discounts	800,000	500,000
Debtors/Creditors	1,800,000	15,500,000
Bank	14,000,000	
Salaries	15,000,000	
Furniture	6,000,000	
Drawings	11,000,000	
Motor van	117,000,000	
Cash	3,000,000	
TOTAL	283,500,000	283,500,000

Task:

- Prepare an account to determine the Net profit/Loss.
- Ascertain the financial position of the business.



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Uganda Certificate of Lower Secondary Education BIOLOGY HOLIDAY WORK 2024 SENIOR THREE

INSTRUCTIONS: Try out all items, Respond to this work during Holiday time, all answers should be written in a new holiday book.

Item 1

Elijah is a 62 year old man who is running a successful business enterprise including businesses in the town center and a dairy farm. He is however facing some challenges in his business where monitoring is hard due to the distance involved, record keeping from the business and farm records, also theft from the employees.

Task

As an ICT learner, how can you advise Elijah to use ICT and solve the problems in his businesses?

Item 2

A secondary school in Buikwe was gifted with 50 computers to help in the learning process and integration of ICT in the different learning areas. These came with two printers and a wireless router. The head of the school is planning to construct a computer laboratory where these ICT tools will be kept and also support learning.

Task

- Guide the head teacher of the school on what he should consider when setting up the laboratory to ensure safety of the new tools and their proper functioning.
- Advise the learners on the safety precautions when using the computers.

Item 3

A student was doing business calculations and encountered some errors as shown in the table 1.1.

As a learner who understands ICT, help him understand the cause of each error and measures of fixing it

Error	Cause	How to fix
#####		
#DIV/0		
#VALUE!		
#REF!		
#NAME?		

Item 4

Imagine you are at a campsite in a remote village and realize the many features near you are what was required for your Geography coursework. You need to take a number of photos of these features because they will be very helpful in your course work. You only have access to a new digital camera that does not have a memory card but has an inbuilt storage that can accommodate about 5 images and a photo whose webcam is faulty. Both the laptop and the digital camera support Bluetooth technology. You need to take not less than 30 photos for the coursework to be fully covered.

Task

Explain in the details how you can get all the necessary photos without leaving the camp site.

Item 5

The government of the Republic of Uganda resolved to have all the public offices & school to have brand new computers donated through ministry of ICT. It will a mandate that office holders should adopt use of these machines.

However, in a certain school in Karamoja it so happened that almost all the workers have little or no computer literacy at all, this has caused a lot of worries anxiety and misery that has hit almost everyone among the staff.



Tasks

You have been invited as a special guest of the day during the school retreat.

- a) Prepare a presentation that will help the school about the items being delivered. Be clear on what they are and how each can be used.
- b) After the occasion, you were given a packaged gift, with a lot anxiety reaching home to find out, you discovered that you had the following items;

- i. 3 power cables
- ii. VGA cable
- iii. An extension cable
- iv. Power socket



Task

Assuming you have been waiting for the above equipment to have a working computer system, describe how you can have a working computer system

Uganda Certificate of Lower Secondary Education
BIOLOGY HOLIDAY WORK 2024
SENIOR THREE

Item 1

Ancient Greek sculpture is widely recognized as one of the most prominent and influential art forms in history. It was produced under several significant periods that shaped its development. One of the defining features of Greek sculpture is the emphasis on the human form. Representations of humans in ancient Greek sculpture evolved from static, conventionalized forms to more naturalistic and expressionistic figures. The human body was depicted in a variety of poses and situations. Ancient Greek sculpture continues to inspire and influence artists today, making it an essential aspect of our cultural heritage.

Task

As a student of art history, make a write up about the characteristic features of Greek sculpture produced between 480-323 BC.

Item 2

While it is true the Romans were great copiers of Art and Architecture of Greeks, they were also inventive and innovative in a number of areas. Roman Architecture, for example, produced essential innovations in construction of many public buildings projects such as the Colosseum, the Pantheon and Aqueducts.

Task

- a) Cite four roman architectural innovations and explain their significance.
- b) Explain the influence of Roman Architecture on Uganda's buildings styles.

ITEM 3

While watching news on a TV a news anchor (news reader) reported about the government's program of skilling citizens. Many products were shown that were made by the people that had gone through the training. Some of the products that were shown are these below



After the news a child asked his parents about how such products are made and for which purpose they serve, but the parent had no convincing response to the child.

Task

If the child asked you, what would your response be in regards to either one the products

ITEM 4

UN EMPLOYMENT has of late become a global challenge. it has resulted into theft and insecurity that threatens peace. In a bid to fight this challenge, an organization has poetized training un employed people with vocational skills that will equip people with the knowledge of making income generating products. Some of the products that the organization has researched about and wishes to train are these below



Much as the organization picked interest in the above products, it lacks information about what is required and how such products are made

Task

As a knowledgeable person in art and design, make a suitable document that explains what is required and how any one of the two artworks above are made