YEAR 13

ACCOUNTING

LESSON NOTES

WEEK 1

STRAND 3 – COMPANY ACCOUNTING

Lesson 3.2 Formation Of Companies

Share issues

It is the company directors who decide the number of shares to be issued and the conditions of the issue. This is done at a directors" meeting and the decision is recorded in the company"s minute book.

Achievement Indicator

Able to define share capital, authorised capital, issued capital, unissued capital, uncalled capital, application, allotment, calls, call in arrears and call in advance.

Share capital

A company can issue shares on the terms with the rights and restrictions that the directors determine. Share capital consists of all funds raised by a company in exchange for shares of either common or preferred shares of stock. The amount of share capital or equity financing a company has can change over time. A company that wishes to raise more equity can obtain authorisation to issue and sell additional shares, thereby increasing its share capital.

Terms used in accounting for the issue of shares in a company

Authorised capital – The total value of the shares that a company is entitled to sell to the public.

Issued capital – it is the total value of the shares that a company has issued to shareholders.Unissued capital – value of the shares that has not yet been issued to the public.

Uncalled capital (Equity receivable) - the proportion of the issue price of the shares that shareholders have not been requested to pay to the company.

Application – the proportion of the issue price of the shares that shareholders are requested to send with their applications to buy the shares.

1

Allotment – the installment that is required to be paid when the shareholder receives notification of the allotment of the shares.

Calls – all installments of the issue price requested after the shares have been allotted.

Calls in arrears – calls that shareholders have not yet paid upon request by the company. Also known as unpaid calls.

Calls in advance - money received in advance from shareholders for calls not yet made.

Achievement Indicator

Able to calculate the issue of shares fully payable on application and instalments

Issue of shares fully payable on Application

Before issuing any shares to the public, a company must provide disclosure documents such as prospectus, with an application form. The money received must be kept in a separate bank account until the company has allotted shares or returned the money to applicants.

For example; on 1st January 2017, Pan Pacific Company registered with capital of 500 000 \$1 shares. The directors of Pan Pacific Company have decided to issue 200 000 shares at an issue price of \$1. A prospectus has been issued and states that the full price of the share is to be included with the application form. All the shares have been subscribed for and allotted.

The following General Journal entry is made:

Date	Particulars	Dr (\$)	Cr (\$)	
Jan 1	Unissued Capital	500 000		
	Authorised Capital		500 000	
	(To record authorized capital.)			
	Uncalled Capital	200 000		
	Unissued Capital		200 000	
	(Issue of 200 000 shares @ \$1 as per director's resolution.)			
	Application	200 000		
	Equity Receivable/Uncalled Capital		200 000	
	(200 000 shares issued at \$1 as per directors resolution in			
	minutes book.)			

Note: This entry does not indicate any receipt of cash. Application monies must be placed in a special trust account as the money does not belong to the company until the shares are allotted.

Equity Receivable is another term for Uncalled Capital and can be used interchangeably.

Assuming that all money due is received, therefore the following entry is made:

-	General Journal		
Date	Particulars	Dr (\$)	Cr (\$)
Jan 1	Cash at Bank - Share Trust	200 000	
Application 200 000		200 000	
	(Receipts of cash of \$1 per share on 200 000 shares)		
	Cash at Bank - general	200 000	
	Cash at Bank – share trust		200 000
	(Transfer of trust monies to Cash at Bank account)		

NAME:
YEAR:

HOME STUDY PACKAGE

YEAR 13

ACCOUNTING

WORKSHEET-1

WEEK 1- FORMATION OF COMPANIES

ACTIVITY 3.2.1

Henry Company Limited was registered on 1st July 2018 with a registered capital of 100 000 shares @ \$2 each. On that date the directors decided to issue 70 000 shares to the public. The shares were required to be paid in full on application. Applications for shares were received by 20th July. The directors allotted the shares on 26th July 2018.

Required:

a. Show the general journal entries.

Date	Particulars	Debit (\$)	Credit (\$)

LESSON NOTES

Year/Level: 13B Subject: APPLIED TECHNOLOGY

Week: 1

Strand	Carpentry and Joinery.
Sub Strand	Safe Working Practice
Content Learning Outcome	Determine the safety usages and its application

Chapter 6

Applied Engineering - Health and safety is not optional in your career, but an essential part of working in the industry.

Accident, first aid and emergency procedures and reporting

Reporting accidents all accidents need to be reported and recorded in the accident book and the injured person must report to a trained first aider. An accident may result in an injury which may be minor (e.g. a cut or a bruise) or major (e.g. loss of a limb)

You will need to enter some basic details, including:

- who was involved, what happened and where
- the date and time of the accident and any witnesses
- the address of the injured person

Hazards on construction sites

A major part of health and safety at work is being able to identify

A major part of health and safety at work is being able to identify hazards and to help prevent them in this place, therefore avoiding the risk of injury.

Risk assessments and method statements

You must know how to carry out a risk assessment. You must be aware of the dangers or hazards of any task, and know what can be done to prevent or reduce the risk.

There are five steps in a risk assessment:

Step 1 Identify the hazards.

Step 2 Identify who is at risk.

Step 3 Calculate the risk from the hazard against the likelihood of it taking place.

Step 4 Introduce measures to reduce the risk.

Step 5 Monitor the risk. A method statement takes information about significant risks from risk assessments and combines them with the job specification to produce a practical and safe working method for the workers to follow for tasks on site.

Health and hygiene

One of the easiest ways to stay healthy is to wash your hands on a regular basis to prevent hazardous substances from entering your body. Health effects of noise Damage to hearing can be caused by two things:

• Intensity – you can be hurt in an instant from an explosive or very loud noise which can burst your ear drum.

• Duration – noise doesn't have to be deafening to harm you; it can be a quieter noise over a longer period, e.g. a 12-hour shift

Safe handling of materials and equipment

Spinal injury is the most common injury and is very serious because, very often, there is little doctors can do to correct it. When lifting a load the correct posture is as follows:

- Feet shoulder width apart, with one foot slightly in front of the other.
- Knees bent with the back straight and arms as close to the body as possible.

Safe storage and handling of tools and equipment Tools

All tools need to be stored safely and securely in suitable bags or boxes to protect them from weather and rust. When not in use they should be safely locked away

Туре	Storage and handling issues
Bricks and blocks	Store on level ground close to where they are
	required and stack on edge in rows no more
	than two packs high. Take from a minimum
	of three packs and mix to prevent changes in
	colour in nail brickwork
Paving slabs	Do not stack higher than two packs. Store
	outside and stack on edge to prevent lower
	slabs being damaged by the weight of the
	stack. Store on ram, level ground with timber
	bearers below to prevent damage to edges.

Aggregates cement and plaster

Aggregates are delivered in tipper lorries or one-tons bags. They should be stored on a concrete base, with a fall to allow for water to drain away.

Wood and sheet materials

Types	Storage and handling	
Car casing timber	Store outside under a covered framework, on	
	timber bearers clear of the ground, vegetation	
	free to reduce ground moisture absorption	
Joinery grade and hardwoods	Store under full cover with ventilation to	
	prevent build-up of moisture. Store on	
	bearers on a well-prepared base	
Plywood and sheet materials	Store in a dry, well-ventilated environment.	
	Do not lean them against walls as this makes	
	the wood bow. For faces, place these against	
	each other to minimize risk of damage.	

Adhesives

They are usually stored on shelves, with labels facing outwards, in a safe, secure area (preferably a lockable store room). It is important to keep the labels facing outwards so that the correct adhesive can be selected correctly.**Paint and decorating equipment**

Туре	Storage issues
Oil- and water-based paint	Store at a constant temperature in date order
	(new stock at the back) on clearly marked
	shelves with the labels turned to the front.
Powdered materials	Heavy bags should be stored at ground level.
	Smaller items should be stored on shelves
	with loose materials in sealed containers.
	Protect from frost, moisture and high
	humidity.

Basic working platforms (Fall protection)

With any task involving working at height, the main danger is falling. There are certain tasks where edge protection or scaffolding simply cannot be used.

Type of fall protection	Description	
Harnesses and lanyards	A harness is attached to the worker and a	
	lanyard to a secure beam/eyebolt. If the	
	worker slips, they will fall only the length of	
	the lanyard	
Safety netting	Used on the top floor where there is no point	
	for a lanyard. Nets are attached to the joists	
	to catch any falling workers.	
Air bags	Made from interlinked modular air	
	mattresses that expand together to form a soft	
	fall surface. Ideal for short-fall job	

Stepladders and ladders

Ladders should only be set up on ground that is firm and level. All components should be checked fully before use. Do not use ladders to gain extra height on a working platform.

Type of ladder	Safety issues	
Wood	Check for loose screws, nuts, bolts and	
	hinges. Check tie ropes are in good	
	condition. Never paint as this will hide	
	defects	
Aluminum	Avoid working near live electricity supplies.	
Fibre glass	Once damaged, this type of ladder cannot be	
	repaired and must be replaced.	

Using a stepladder - Stepladders should only be used for work that will take a few minutes to complete.

Using ladders - Ladders are not designed for work of a long duration and should be secured in place. One hand should always be free to hold the ladder and you should not have to stretch while using it.

- Ensure that there is at least a four-rung overlap on each extension section.
- never rest on plastic guttering as it may break, causing the ladder to slip.

Scaffolding - Tubular scaffold is the most commonly used type of scaffolding within the construction industry. There are two types of tubular scaffold:

• Independent scaffold – free-standing and does not rely on the building to support it.

Working with electricity - One of the main problems with electricity is that it is invisible. Working close to electrical supplies can put you at risk. There are two main types of voltage in the UK. These are 230 V and 110 V. The standard UK power supply is 230 V and this is what all the sockets in your house are. The three wires are color-coded as follows to make them easy to recognize:

live - brown, neutral - blue , earth - yellow and green.

230 V has been deemed as unsafe on construction sites, so 110 V must be used. This is identified by a yellow cable and different style plug. A transformer converts the 230 V to 110 V. In domestic situations a portable transformer should be used

Dealing with electric shocks

Touching the power source may put you in danger. If the victim is in contact with something portable (e.g. a drill), move it away using a non-conductive object such as a wooden broom. Their muscles may also contract, preventing them from moving. Use a wooden object to swiftly and strongly knock the person free.

Using appropriate personal protective equipment (PPE)

Personal protective equipment (PPE) forms a defense against accidents or injury. PPE should be used with all the other methods of staying safe in the workplace. It must be regularly maintained; otherwise its effectiveness may be compromised. This means that PPE needs to be cleaned and examined on a regular basis and, where necessary, replaced or repaired. The cost of maintaining PPE is the responsibility of the employer.

Fire and emergency procedures - Fire moves by consuming all these ingredients and burns fuel as it moves. Fires can be classified according to the type of material that is involved:

• Class A – wood, paper, textiles, etc. • Class B – € flammable liquids, petrol, oil, etc.

• Class $C - \in$ flammable gases, liquefied petroleum gas (LPG), propane, etc. • Class D -metal, metal powder, etc. • Class E -electrical equipment. There are several different types of re extinguisher and it is important that you learn which type should be used on each class of fires.

Fire extinguisher	Color band	Main use	Detail
water	Red	Class A fire	Never use for an
			electrical or burning
			fat/oil re. Water will
			conduct electricity and
			"explode" oil and fat
			res
foam	cream	Class A fire	Can also be used on
			Class B res if no liquid
			is α owing and on
Carbon dioxide(co2)	black	Class E fire	Can also be used on
			Class A, B and C res.
Powder	blue	All classes	Commonly used on
			electrical and liquid
			res.

Safety signs and notices

• Prohibition signs , • Mandatory signs , • Warning signs

HOME STUDY PACKAGE

School: Labasa Sangam (SKM) College Subject: Technical Drawing Worksheet Number 1 Year/Level: 13B Student Name: Due Date: 26th July 2021

- 1. While reporting emergency accident in a workshop, what are **three** basic details that you need to enter.
- 2. State five steps in a risk assessment
- 3. State **2** damage to our hearing that is caused by Nosie.
- 4. Provide **2** correct posture of lifting a load
- 5. Why it is important to store the tools at the right place?
- 6. Why it is important to handle the tool correctly while working with it?
- 7. Why it is important to keep the adhesive labels facing outwards
- 8. State **2** types of fall protection and provide there description
- 9. State **2** types ladders and state there safety usages
- 10. State **3** types of wires and there coding.
- 11. State **5** classes of classification of fire extinguish according to their type of material

SUBJECT TEACHER: ASHNEEL RONAL PRASAD

CONTACT: 9608255

HOME STUDY PACKAGE

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SUBJECT TEACHER: ASHNEEL RONAL PRASAD

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Home Study Package Lesson Notes

Year/ Level: 13

Subject: Chemistry

Week: 1

Teachers Contact: 13A: RN: 959 3737 , 13B : NS: 921 7971 , 13C: NK: 926 1652

Strand	3 Physical Chemistry
Sub Strand	3.1 Electrochemistry
Content	- Define oxidation and reduction in terms of increase or decrease in oxidation
Learning	number.
Outcome	- Identify redox reactions using oxidation numbers.
	- Identify oxidising and reducing agents.

Electrochemistry

- Electrochemistry is the branch of physical chemistry that studies processes in which redox reactions are brought about by electricity or used to produce electricity.
- These reactions take place in electrochemical cells which involves electrons moving between electrodes and an electrolyte.

Redox Reactions

- Oxidation signifies a reaction in which oxygen combines chemically with another substance while reduction signifies loss of oxygen from a substance.
- are reactions where the electrons are transferred from one species to another.
- also known as electron transfer reactions.

Uses of redox reactions:

- generation of electricity.
- recharging rechargeable batteries.
- electrolytic extraction of metals (aluminium, copper and sodium).
- electroplating (also known as electrodeposition).
- quantitative analysis (redox titration).

Oxidation	Reduction
• Addition of oxygen.	• Removal of oxygen.
Removal of hydrogen.	Addition of hydrogen.
Removal of electrons.	• Addition of electrons.
• Increase in the oxidation state.	• Decrease in the oxidation state.

Oxidation Number(ON)

- is the charge an atom would carry if the molecule or ion were completely ionic.
- also known as oxidation state.

Rules for Assigning Oxidation Numbers

- 1. When atoms exist as elements, they have an oxidation number of zero. E.g. Na, Cl₂, Ne, C and H₂ all have an oxidation number of zero.
- 2. The oxidation number of a monoatomic (one atom) ion is the same as the charge on the ion.

E.g. Ca^{2+} has an oxidation number +2, Cl^{-} has oxidation number -1.

3. Hydrogen in compounds has an oxidation number of +1, except in metal hydrides where it is -1.

E.g. Hydrogen in H_2O has an oxidation number +1; in NaH, a metal hydride, the oxidation number of hydrogen is -1.

- 4. Oxygen in compounds has an oxidation number of -2, except in hydrogen peroxide (H_2O_2) , where its oxidation number is -1 and in oxygen difluoride (OF_2) where it is +2.
- 5. For polyatomic ions (ions containing more than one atom), the sum of the oxidation numbers of the atoms equals the charge of the ion.

E.g. For NH_4^+ , the sum of oxidation numbers is +1; for SO_4^{2-} , the sum of oxidation numbers of the atoms is -2.

- 6. The sum of the oxidation numbers of the atoms in a molecule is zero. E.g. The sum of the oxidation number for the atoms in H_2SO_4 is zero.
- 7. Oxidation number of Group 1 metals in a compound is +1.
- 8. Oxidation number of Group 2 metals in a compound is +2.

Example

Calculate the oxidation number of S in H₂SO₄.

Solution	
2H + S + 4O	=0
2(+1) + S + 4(-2)	= 0
2 + S - 8	= 0
S – 6	= 0
S	= +6

Oxidants (Oxidising Agents)

• are substances that enhances oxidation to take place but itself gets reduced.

<u>Reductant</u> (Reducing Agents)

• are substances that enhances reduction to take place but itself gets oxidised.

Oxidant	Reductant
oxidation number has decreased	oxidation number has increased
accepts electrons	donates electrons
transfers oxygen to another substance	removes oxygen from another substance
removes hydrogen from the other substance	transfers hydrogen to another substance

HOME STUDY PACKAGE

WORKSHEET NUMBER 1

STUDENT NAME:	YEAR: 13	

SUBJECT: CHEMISTRY

DUE DATE: 26THJULY, 2021

Write the answers in the space provided.

1. Use the words from the list to fill the table below which summarizes the differences between oxidation and reduction.

	Gain Loss Increase Decrease
--	-----------------------------

	OXIDATION	REDUCTION
Oxygen		
Hydrogen		
Electron		
Oxidation State		

- 2. Calculate the oxidation number of the following.
 - a. Cl in ClO_4^-

b. S in $Na_2S_4O_6$

- c. Cr in Cr₂O₇²⁻
- 4. Identify the reductant and oxidant in the redox reactions given and write your answers in the table below.
 - a. $2Ag^{+}_{(aq)} + Sn_{(s)} \rightarrow Sn^{2+}_{(aq)} + 2Ag_{(s)}$
 - b. $Cu_{(s)} + 2Ag^+_{(aq)} \rightarrow Cu^{2+}_{(aq)} + 2Ag_{(s)}$
 - c. $CuO_{(s)} + H_{2(g)} \rightarrow Cu_{(s)} + H_2O_{(d)}$
 - d. $Zn_{(s)} + CuSO_{4(aq)} \rightarrow ZnSO_{4(aq)} + Cu_{(s)}$
 - e. $MnO_{2(s)}$ + $4H^{+}_{(aq)}$ + $2Cl^{-}_{(aq)} \rightarrow Mn^{2+}_{(aq)}$ + $2H_2O_{(l)}$ + $Cl_{2(g)}$
 - $f. \quad 5SO_{3}^{2-}{}_{(aq)} + 2MnO_{4}^{2-}{}_{(aq)} + 6H^{+}{}_{(aq)} \rightarrow \\ 5SO_{4}^{2-}{}_{(aq)} + 2Mn^{2+}{}_{(aq)} + 3H_{2}O_{(b)} + 2Mn^{2+}{}_{(aq)} + 3H_{2}O_{(b)} + 2Mn^{2+}{}_{(aq)} + 3H_{2}O_{(b)} + 2Mn^{2+}{}_{(aq)} + 2Mn^{2+}{}_{(aq)}$

	REDUCTANT	OXIDANT
a.		
b.		
с.		
d.		
e.		
f.		

LESSON NOTES

SCHOOL:	LABASA SANGAM (SKM) COLLEGE YEAR: 13 SUBJECT: GEOGR				GEOGRAPHY
Strand:	PHYSICAL GEOGRAPHY				
Sub Strand	GEO 13.1.3.1				
Content Learning Outcome	Gather information on structure and composition of the atmosphere.				

Week 1

Introduction

The **climate system** is an **interactive system** consisting of five major components: the atmosphere, the hydrosphere, the cryosphere, the land surface and the biosphere, forced or influenced by various external forcing mechanisms, the most important of which is the Sun.

Definition of Climate: The climate is describes the long term (min 30 years) and average weather conditions for a specific region. Examples: maritime climate, cold-dry desert climate, tropical climate.



(Source:

http://wancierscience.weebly.com/)

Climate of a place is determined by both nature and human-made (anthropogenic) factors:

- The earth's **climate** is **influenced** and changed through **natural causes** like volcanic eruptions, ocean currents, the Earth's orbital changes, solar variations and internal variability.
- **Humans** are increasingly **influencing** the **climate** and the earth's temperature by burning fossil fuels, cutting down forests and farming livestock. This adds enormous amounts of greenhouse gases to those naturally occurring in the atmosphere, increasing the greenhouse effect and global warming.

Structure of the Earth

The **atmosphere** is comprised of layers based on temperature. These layers are the troposphere, stratosphere, mesosphere and thermosphere. A further region at about 500 km above the Earth's surface is called the exosphere.

Earth's **atmosphere** is composed of about 78% nitrogen, 21% oxygen, and 0.93% argon. The remainder, less than 0.1%, contains such trace gases as water vapor, carbon dioxide, and ozone.



The **atmosphere** can be divided into vertical layers determined by the way temperature changes with altitude.

Troposphere

Is the lowest region of the atmosphere, bounded by the Earth beneath and the stratosphere above, with its upper being the tropopause, boundary about 10-18 km (6-11 miles) above the Earth's surface. The troposphere is characterized by decreasing temperature with height and is distinguished from the overlying stratosphere by a region of

nearly constant temperature in the lower stratosphere. Most of the clouds and weather systems are contained within the troposphere. This layer contains most of Earth's clouds and is the location where weather primarily occurs.

(Source: <u>http://teachertech.rice.edu</u>)

Stratosphere

Layer of Earth's atmosphere lying between the troposphere and the mesosphere. The lower portion of the stratosphere is nearly isothermal (a layer of constant temperature), whereas temperatures in its upper levels increase with altitude. The stratosphere extends from the tropopause at about 10 to 17 km (about 6 to 11 miles) altitude to its upper boundary (the stratopause) at about 50 km (30 miles), and it also contains the ozone layer. Solar energy is converted to kinetic energy when absorb ultraviolet radiation, resulting in heating of the stratosphere. Moreover, the air is very dry and thousand times thinner than at sea-level. In this strata aircrafts and weather balloons fly.

Mesosphere, region of the upper atmosphere between about 50 and 80 km (30 and 50 miles) above the surface of the Earth. The base of the mesosphere is defined as the temperature maximum existing at the top of the stratosphere, with the boundary between the two regions usually called the stratopause. The mesosphere extends upward to the next temperature minimum, which defines the base of the thermosphere; the boundary between the two regions is

called the mesopause. The coldest temperatures in Earth's atmosphere occur at the top of this, the mesopause averaging to minus 90°C.

The percentage of oxygen, nitrogen, and carbon dioxide in the air in the mesosphere is essentially the same as that in the levels of the Earth's atmosphere immediately above the Earth's surface. The principal differences are that the density of the air is much less, there is very little water vapor in the mesosphere, and the mesosphere contains higher percentages of ozone than the lower levels.

Thermosphere

The thermosphere is located above mesosphere. The temperature in the thermosphere generally increases with reaching 500 km to 1000km. temperatures can get up to 1500°C at this altitude. This layer is considered part of the earth's atmosphere; air density is very low when compared to other layers and is considered to be the outer space. This layers where the space shuttle flew and the international Space Station Orbits Earth. In this layer an aurora also occurs such as Aurora Borealis (Northern Lights) and Auroras Australis (Southern Lights).

An **aurora** is a natural phenomenon which is characterized by a display of a natural-coloured (green, red, yellow or white) light in the sky. It is a light show which is caused when electrically-charged particles from the sun collide with particles from gases such as oxygen and nitrogen present in the Earth's atmosphere.



(Source: https://macrovector.com)

HOME STUDY PACKAGE LABASA SANGAM (SKM) COLLEGE

YEAR: 13

SUBJECT: GEOGRAPHY

WORKSHEET 1

(Read the notes provided for Week One and answer the following questions)

a. D	fine the following terms:
(i)	climate
(ii)	geosphere
. ,	
(iii)	atmosphere
()	The second s
(iv)	biosphere
(1V)	
(v)	hydrosphere
(vi)	cryosphere

b. Explain what happens to the temperature as you ascend through the following layers of the atmosphere.

i.	Troposphere
ii.	Stratosphere
iii.	
iv.	Thermosphere
c. Wl i.	hat is the name and approximate height at the boundary between the troposphere and stratosphere
ii.	Stratosphere and mesosphere
iii.	Mesosphere and thermosphere

SCHOOL: LABASA SANGAM (SKM) COLLEGE

YEAR/LEVEL: 13

SUBJECT: ECONOMICS

July 5th – July 9th

Strand 3	Macroeconomics
Sub-Strand	Secondary Factors Affecting Money Supply

SECONDARY FACTORS AFFECTING MONEY SUPPLY

Achievement Indicators:

- 4 Identify and explain the factors that cause secondary expansion in money supply.
- Discuss the effects of secondary factors on money supply.
- **W** Draw a simple and Combined Registered Bank Balance Sheet.
- Secondary expansion of money supply results from *credit creation process*.
- Individual banks do not create money but when they lend their excess reserves the banking system as a whole is able to create the credit.
- Credit creation model illustrates how commercial banks expand deposits through loans, advances and investments.
- The banking system as a whole can create credit which is several times more than the original increase in the deposits of a bank.
- The banks also prepare a balance sheet showing the financial position of bank, hence what the banks owns and owes.
- A deposit by customer is assets for the customer but for the bank it is considered as liabilities since bank owes the customer.

Detailed balance sheet of registered bank and reserves appears like this:

Balance sheet of combined registered banks					
Assets	\$	Liabilities	\$		
Cash(notes and coins)	10	Transaction accounts(public):			
Deposits at reserve bank(settlement cash)	1000	Demand deposits	2810		
Reserve banks bills	100	Time deposits	2000		
Government securities	500				
Other investments	400				
Loans(advances)	2800				
	<u>\$ 4810</u>		<u>\$ 4810</u>		

Balance sheet of combined Reserve bank			
Assets	\$	Liabilities	\$
Overseas assets	500	Bank notes on issue	400
Investments	700	Deposits:	
Loan to government	400	Registered banks	1000
		Government	100
		Reserve bank bills	100
	<u>\$ 1600</u>		<u>\$ 1600</u>

A simple balance of trading bank which appears like this.

Trading bank balance sheet(simplified version)			
Assets	\$	Liabilities	\$
Notes and coins	х	Demand deposit	х
Demand deposits (RBF)	х	Time deposit	х
Time deposits(RBF)	x		
Government securities	x		
Overseas assets	х		
Advances	х		

Balance sheet interpretation:

- *Liabilities:* side of balance sheet shows where the banks got the financing from. It consists of customer's deposit which has to be repaid to depositors.
- *Assets:* this side shows what the bank did with its sources of funds.
 - (i) Notes and coins (tilt/vault money)-notes and coins kept by the bank.
 - (ii) Demand deposits (with RBF)-cheques account of commercial banks kept with RBF.

- (iii)Time deposits (with RBF)-act as fixed term deposit and left undistributed for fixed term to earn interest.
- (iv)Government securities-loan to government. Long term government loans/securities known as government stock and short term as treasury bills.
- (v) Overseas assets-foreign currency held by banks which gain to those who import goods and services.
- (vi)Advance-overdraft or customer loan.

Reserve banks balance sheet(simplified version)				
Assets \$ Liabilities \$				
Overseas assets	х	Bank notes on issue	х	
Investment (overseas)	х	Deposit of commercial bank	х	
Loan to government	х	Reserve bank bill	х	

Achievement Indicator:

Lescribe the secondary causes and effects of changes in the money supply.

- *Credit creation process* banks do not create notes and coin but they create credit or deposits and this requires reserve ratio.
- The credit creation model shows how banks can increase money supply through lending process. The amount of credit created depends on the size of the credit multiplier.
- The cycle of credit creation is called a **credit multiplier**.
- It is the level of withdrawal from the cycle that determines the extent of the credit multiplier.
- The multiplier causes an increase in money supply.
- Reserve ratio is used to find credit multiplier.
- **Reserve ratio** is percentage of deposits retained by commercial banks as requirement of RBF.
- Reserve ratio is also known as required reserve ratio, prudent asset ratio or required asset ratio.



Credit multiplier-is an indicator of final changes in the bank deposit which originated from initial change.

Formula for credit multiplier (CM) = $\frac{1}{RR}$

Assumptions of Credit Creation Process

1. Loans borrowed from one bank are deposited in another bank. The second keeps its required reserves and lends the rest. The cycle continues until no more loans can be made.

2. If money creation continues in geometric progression, then the total MS created would be:

Formula to ca	lculate the se	condary expan	sion	
			=	<u>Initial deposit (1 - RR)</u>
				RR

- 3. Banks must keep as minimum required reserve. All people deposit money and get loans.
- 4. There is no leakage.
- 5. People should willingly take loans.

WEEK 1

SHORT ANSWER QUESTIONS

Write the answers in the space provided.

1.	Define	:
	(i)	Nutrition
	(ii)	Nutritional Status
2.	List tw	vo methods which can be used to determine a person's nutritional status.
	(i)	
	(ii)	
3.	State t	wo signs of:
	Good	nutritional status
	(i)	
	(ii)	
	Poor n	utritional status
	(i)	
	(ii)	
4.	Give tl	hree reasons as to why a good diet is essential for a person.
	(i)	
	(ii)	
	(iii)	

LESSON NOTES

School: Labasa Sangam (SKM) College Subject: Technical Drawing Year/Level: 13B Week: 1

Strand	Geometry
Sub Strand	Centroids
Content Learning Outcome	Determine the centroid of composite shapes
	using funicular/Link polygon method.

Lesson Notes

Centroid

The centroid of a body is the center of its mass (or masses), the point at which it would be stable, or balance, under the influence of gravity. It is also often called the **center of gravity** and the **geo center.** The term is essentially the same as the Greek term known to Archimedes.

CENTROIDS FOUND BY FURNICULAR OR LINK POLYGON.

This is another graphical method of finding the centroid of shapes. Instead of using the ratio of areas, it uses polar polygons and Furnicular polygons to locate the centroid.

Example 1: h shape block



Divide the h shape into simple shapes such a three rectangles.

Determine the area of each rectangle

Determine the centroid of each rectangle.



Using an appropriate scale to convert the area into units, draw a force diagram. Join the force diagram to a pole, o, to make a polar polygon.

Using the polar polygon draw the Furnicular polygon.

- Draw another force diagram and polar polygon using the same scale at a different location.
- Draw the second Furnicular polygon using this polar polygon.
- Extend lines from the two Furnicular polygons.
- These lines intersect to locate the centroid of the h block.

HOME STUDY PACKAGE

School: Labasa Sangam (SKM) College

Subject: Technical Drawing

Worksheet Number 1

1. <u>Given</u>: A Shaped Block

<u>Required</u>: Find the Centroid using funicular or link polygons method (10 marks)



Year/Level: 1	3
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Student Name: _____

Due Date: 26th July 2021

	QUESTION 1		
1	Divide the figure	1	
2	1 st force diagram	1	
3	2 nd force diagram	1	
4	1 st Funicular polygon	2	
5	2 nd funicular polygon	2	
6	Centroid	1	
7	Resultant	1	
8	Accuracy /neatness	1	

2. <u>Given</u>: A composite geometrical shape

<u>Required</u>: Find the Centroid using funicular or link polygons method. (10 marks)



	QUESTION 2		
1	Divide the figure	1	
2	1 st force diagram	1	
3	2 nd force diagram	1	
4	1 st Funicular polygon	2	
5	2 nd funicular polygon	2	
6	Centroid	1	
7	Resultant	1	
8	Accuracy /neatness	1	

LABASA SANGAM COLLEGE

WEEK 1 YEAR: 13DE SUBJECT: VOSA VAKAVITI

STRAND	ITovo Vakavanua(Culture)
SUB STRAND	Tabacakacaka Itaukei kei na Tabana ni matanitu (iTaukei Affairs)
CONTENT LEARNING OUTCOME:	For students to know the various departments under the iTaukei Affairs and their roles in the community

Na tabana e yadrava ka qarava na veika me baleti keda na kawa itaukei. Na keda itukutuku, itovo, vakarau, vosa, kei na noda iyaubula.

E wase vakatolu na tabana e qarava na Tabacakacaka iTaukei:

- Tabana ni iTovo kei na Vosa vakaViti
- Veitarogi Vanua kei na Wai ni Qoliqoli
- iVola ni Kawabula

1. Tabana ni Vosa kei na iTovo vakaViti

- E qarava na noda vosa, itovo kei na kena ivakarau.
- E nodratou itavi me ratou vola na iVolavosa vakaViti (Dictionary)
- E ratou tabaka na ivola vakaViti eso me maroroi ka katoni tu kina na keda itukutuku
- E ratou na laki tabaka vakaiyaloyalo, vola, ka katona eso na veisoqo se veiqaravi eso vakaViti.

2. Veitarogi Vanua kei na Wai ni Qoliqoli

- Na tabana oqo e dau laki vakatau lewa ena gauna e veiletitaki se veibataki kina na itutu vakavanua, yalayala ni qele se qoliqoli ni dua na mataqali se vanua.
- Na nodratou vakatulewa e sega ni rawa ni laki veilewaitaki tale ena mataveilewai ka sa dau vakabau saraga
- E tiko vei iratou na itukutuku kece ka ra a solia sara ka vosa bubului kina na veituraga ni mataqali kei na turaga ni vanua me baleta na nodra kawa kei na vanua.

3. iVola Kawabula

• e ratou maroroya, vakavoutaka ka tomana na ivola ni kawa bula ni veitasana

KE DUA NA VAKATATARO NI QAI VEITARATARA MAI ENA NABA NA 2121376

• e na volai oira na sucu vou se volai vou ka boko oira sa mate

TABANA NI MATANITU

Oqo na veitabana ni veiqaravi ni matanitu. E wili kina na veitabana oqo:

- Matabose ni iLavo Maroroi ni iTaukei (iTaukei Trustfund)
- Tabacakacaka ni Qele kei na iYau Bula ni Matanitu (Ministry of Lands and Mineral Resources)
- Tabacakacaka ni Qele Maroroi (TLTB)
- Tabacakacaka ni Maroroi Tukutuku Makawa(National Archives)
- Tabana ni iTovo kei na iYau (Heritage and Arts)

1. Matabose ni iLavo Maroroi ni iTaukei (iTaukei Trustfund)

- Qarava na veika vakailavo me baleta na kena vakatoroicaketaki na bula kei na maroroi ni itukutuku me baleta na itovo ni kawa iTaukei kei na Rotuma
- Vakatubura na iLavo ka soli yani ena veiyasana
- 2. Tabacakacaka ni Qele kei na iYau Bula ni Matanitu (Ministry of Lands and Mineral Resources)
 - Qarava ka maroroya na qele, qoliqoli kei na iyau bula ka taukena na matanitu
- 3. Tabacakacaka ni Qele Maroroi (TLTB)
 - Qarava na veika me baleta na qele e taukeni vakamataqali se taukena e dua na lewe ni vanua
- 4. Tabacakacaka ni Maroroi Tukutuku Makawa (National Archives)
 - Maroroya na veicakacaka ni liga eso, iyau, koro makawa, ivola, kei na veika eso e baleti keda na kawa itaukei ka da rawa ni raica se tara (tangible)
- 5. Tabana ni iTovo kei na iYau (Heritage and Arts)
 - maroroya na iTukutuku vakasokumuni ka volai me baleta na noda vanua se na veika me baleta na noda iyau se itovo ni bula ka sega ni laurai (intangible)

WEEK 1

WORKSHEET 1

YACAMU: _____ YABAKI: _____

CAKACAKA LAVAKI

Vakasokumuna mai ena veilawa na **inaki, rai** kei na **itavi (aim, vision, mission)** ni vei tabana kece ni **Tabacakacaka iTaukei** ka ratou cauraki tiko oqori

1. TABANA NI ITOVO KEI NA VOSA VAKAVITI

iNaki:

Rai :

iTavi:

2. VEITAROGI VANUA WAI KEI NA IQOLIQOLI

iNaki:

Rai :

KE DUA NA VAKATATARO QAI VEITARATARA MAI ENA NABA NI TALEVONI NA 2121376

iTavi:

3. TABANA NI IVOLA NI KAWABULA

iNaki:

Rai :

iTavi:

KE DUA NA VAKATATARO QAI VEITARATARA MAI ENA NABA NI TALEVONI NA 2121376

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