

## ACCOUNTING FOR NOT-FOR-PROFIT ORGANISATIONS

Accounting is always done with respect to an entity. This entity may be either commercial entities or not-for-profit entities. Not-for-profit entities are not engaged in business activities. The main aim is to provide services to the people without an intention of making profit. They stand for achieving social, cultural, educational, religious or charitable objectives. Sports club, Social organizations, religious institutions, hospitals, educational institutions, professional bodies, libraries etc. are the examples of not-for-profit organizations.

Some not-for-profit entities may undertake trading activities in order to add the income to its working fund. The income obtained from such activities is used for attaining their objectives. For instance, a sports club may run a stationary shop. The income so obtained can be used for developmental activities of the club.

### Characteristics

1. Providing service to a specific group such as education, healthcare etc.
2. Organized as charitable trusts or societies and subscribers are called members.
3. Managed by a managing committee elected by the members.
4. Sources of income – subscription from members, donations, legacies, grant-in-aid etc.
5. Funds raised by such organizations are credited to capital fund or general fund.
6. Surplus is not distributed to the members, rather credited to capital fund.
7. They earn reputation not on the basis of customers' or owners' satisfaction, but on the basis of their contribution to the welfare of the society.
8. The accounting information provided by such organizations is meant for the contributors and to meet the statutory requirement.

**Accounting Records of Not-for-profit organizations** – As the not-for-profit organization is a different type of entity, it needs a different type of accounting procedure. They receive money from its members and other agencies to promote their activities, and they want to know from where the funds are generated, how these funds are utilized and whether there is any surplus or deficit. They are required to maintain a stock register with a complete record of assets and consumables. They do not have a capital account; instead, they maintain a capital fund which includes surplus generated, life membership fees, legacies, donations, grant from government etc.

### Final Accounts or Financial Statements

These organizations are also bound to prepare their financial statements at the end of each accounting period. Since they are not carrying out any trading activities, they need not prepare trading and profit and loss account. But they would be interested to know whether the income is sufficient to meet the expenses, and is there any surplus or deficit, for this purpose they prepare the following statements:-

1. Receipt and Payment Account.
2. Income and Expenditure Account.
3. Balance Sheet.

**Receipts and Payment Accounts** – It includes all cash receipts and cash payments. It is similar to a cash book and hence it serves the purpose of a cash book. All cash transactions whether revenue or capital in nature are accounted. This account begins with opening cash balance and ends with the closing cash balance.

### **Salient Features of Receipts and Payments Account**

1. It is the summary of cash book.
2. It shows the total amounts of all receipts and payments irrespective of the period to which they pertain.
3. It includes all receipts and payments whether they are of capital nature or of revenue nature.
4. The total amount of each receipt and payment is shown in this account whether it is paid in cash or through bank.
5. Non-cash items such as depreciation outstanding expenses accrued income, etc. are not shown in this account.
6. It begins with opening balance of cash in hand and cash at bank (or bank overdraft) and closes with the year end balance of cash in hand/cash at bank or bank overdraft.

**Preparation of Receipts and Payments Accounts** – While preparing a Receipts and Payments account, the following points are to be taken into account:

1. This account is always starts with opening balance of cash in hand and cash at bank. Cash in hand always has a debit balance and hence in debit side whereas cash at bank has either debit or credit balance.
2. All receipts made in cash during the accounting year will be shown on the debit side and all cash payments on the credit side. The nature of transaction i.e. capital or revenue and the period to which the transaction may belong i.e. previous year, current year or future year will not be considered.
3. Only actual cash receipts and cash payments are recorded in this account. All non-cash items such as depreciation on fixed assets, outstanding expenses, outstanding incomes, etc. are not recorded.
4. At the end of accounting period, this account is balanced and it shows the closing balance of cash in hand and at bank or bank overdraft.
5. As the receipts and payments account is maintained under cash system, it serves the purpose of a cash book. So that the management is able to know from where cash was generated and how it was utilized. Also it provides necessary information for the preparation of Income and Expenditure account and Balance Sheet.

*Assignment: Format of Receipts and Payments Account and Income and Expenditure Account and the Balance Sheet of Not-for-Profit organizations.*

**Items of Receipts and Payments Account** – The items of receipts and payments account may be classified as 1. Revenue Receipts, 2. Capital Receipts, 3. Revenue Payments and 4. Capital payments.

1. **Revenue Receipts** – These are the amounts received by the organization on a recurring nature.
  - a. Annual membership subscription.
  - b. Admission fee not capitalized.
  - c. Receipts from sale of old news papers and magazines.
  - d. Hall rent received.

- e. Interest received on investment, fixed deposits and loan advanced.
- f. Donations, grants and legacies (receipt as per the will of a deceased person).
- g. Locker rent, cloak room rent received.
- h. Receipts from sale of refreshment.
- i. Any other items of similar nature.

**2. Capital Receipts** – These are the amounts received during the current year, the benefit of which will relate to future years also. Such receipts are not received at regular intervals.

They include:

- a. Donations from outsiders or members for specific purpose.
- b. Amount received as loans.
- c. Life membership subscription.
- d. Admission fees to the extent capitalized.
- e. Sale proceeds of fixed assets.
- f. Legacies for specific purposes.
- g. Grants received from Government for meeting capital expenditure. E.g. construction of a Library building.
- h. Any other receipts of capital nature.

**3. Revenue Payments** – These are the payments of recurring nature and to be paid at regular intervals.

- a. Salaries, wages and honorarium paid.
- b. Travelling and conveyance allowances.
- c. Rent, taxes, insurance, electricity charges, printing and stationary, postage and telegram, repairs etc.
- d. Payments for organizing sports meets and tournaments.
- e. Payments for purchase of refreshment, dinner etc.
- f. Interest paid on loan and on bank overdraft.
- g. Any other payment of revenue nature.

**4. Capital Payments** – These are the payments made during the current period, the benefits of which are available in the future years also. They are not made at regular intervals.

- a. Construction expenses.
- b. Purchase of fixed assets like furniture, office equipments etc.
- c. Purchase of books for library.
- d. Amounts advanced to outsiders as loans.
- e. Purchase of sports goods and equipments.
- f. Any other payments of capital nature.

**Income and Expenditure Account** – Not-for-profit organizations prepare Income and Expenditure Account which is similar to a Profit and Loss Account of a trading concern. It is a nominal account and is debited with all expenses or losses and credited with all incomes and gains. At the end of the accounting year, if the credit side of the account exceeds the debit side (income over expenditure), it results in '**surplus**' and if the debit side exceeds the credit side (expenditure over income) it results in '**deficit**'.

The surplus has to be either added to capital fund or can be utilized in the manner provided in the specific provisions of such organization and similarly the deficit decreases the capital fund.

**Preparation of Income and Expenditure Account** – While preparing income and expenditure account, the following points are to be considered:

1. It is usually prepared in “T” form taking revenue expenses on debit side and revenue incomes on credit side.
2. It can also be prepared in vertical form, showing revenue incomes first and revenue expenses next. Total of expenses is deducted from total of incomes for ascertaining surplus or deficit.
3. Only revenue items are taken into consideration and capital items are totally excluded.
4. Since it is maintained under accrual basis, current year’s income and expenditure alone are shown. So the revenue receipts and payments relating to previous year(s) and future year(s) are to be adjusted.
5. Outstanding expenses, accrued incomes, prepaid expenses, income received in advance, depreciation, provisions etc. in the current year are to be adjusted.
6. At the end of the accounting year the income and expenditure account is balanced and it reflects surplus or deficit which is transferred to capital fund. Surplus increases the capital fund and deficit decreases the capital fund.

### **Income and Expenditure Account Vs. Receipts and Payments Account**

<b>No.</b>	<b>Basis</b>	<b>Income &amp; Expenditure A/c</b>	<b>Receipts &amp; Payments A/c</b>
1	Nature	It is like a P&L A/c	It is the summary of cash book
2	Nature of Items	It records income and expenditure of revenue nature	It records receipts and payments of revenue and capital nature
3	Period	Items related to the current period only	Items related to preceding and succeeding periods
4	Debit Side	Records expenses and losses	Receipts are recorded
5	Credit Side	Records incomes and gains	Payments are recorded
6	Depreciation	Includes depreciation	Does not include depreciation
7	Opening Balance	No opening balance	Opening Balance represents Cash in hand / at Bank or Overdraft at the beginning
8	Closing Balance	Balance represents surplus or deficit	Closing Balance represents Cash in hand / at Bank or Overdraft at the end

**Treatment of Subscription** – Current year subscription is to be calculated and it is shown on the credit side of Income and Expenditure Account. Whereas, subscription received for some specific purpose like subscription for tournament fund, subscription for construction of a building etc. should be capitalized and hence shown on the liability side of the Balance Sheet.

**Treatment of Special purpose fund** – E.g. Tournament fund, Charity fund, Prize fund, Endowment fund etc. If there is any expense or income relating to that fund, it should not be shown in the Income and Expenditure account, but adjusted to that fund on the liability side as follows:

	Dr.	Cr.
Tournament fund		15000
Tournament fund investment	15000	
Tournament expense	1750	
Tournament income		1400
Interest received on tournament fund invt.		1200

Here, tournament investment Rs.15000 will be shown on the assets side of the balance sheet. Whereas, the tournament fund will be shown on the liability side as follows:

Tournament fund	15000	
Add: Tournament income	1400	
Add: Interest on Tournament fund invt.	<u>1200</u>	
	17600	
Less: Tournament expenses	<u>1750</u>	15850

### **Precautions to be taken while preparing Income and Expenditure Account**

1. Income and Expenditure account for the year should show the income and expenditure for that year only.
2. If current year's income includes income of previous year and next year, it must be deducted.
3. If current year's expenditure includes expenses of previous year or next year, it must be deducted.
4. Generally we assume that outstanding expenses for the previous year must have been paid during the current year. Similarly, outstanding income of the previous year must have been received during the current year.
5. If any income received in advance in the previous year, it should be considered as the income of the current year.

\*\*\*\*\*

## ACCOUNTING FOR PARTNERSHIP - BASIC CONCEPTS

**Nature and Definition of Partnership** – In order to overcome the limitations of sole proprietorship such as limited capital, limited managerial ability, limited risk bearing capacity, it will be better to think about a new form of business organization, ie; the Partnership when a business wants to expand or to invest a large amount of capital two or more persons join hands to run it. They agree to share the capital, the management, the risk and the profit and such a mutual relationship based on the agreement among these persons is termed as partnership.

**Definition** - Indian Partnership Act 1932 defines Partnership as “the relation between persons who have agreed to share the profits of a business carried on by all or any of them acting for all.”

### Partnership Deed / Articles of Partnership

It is the document which contains the terms of partnership as agreed by the partners. It can be either oral or in writing but it is desirable to have it in writing to avoid any misunderstanding in future.

### Contents of the Deed

1. Name of the firm
2. Names and addresses of all partners
3. Nature and place of business
4. Date of Commencement of partnership
5. Duration of partnership, if any
6. Capital contribution by the partners
7. The amount which can be withdrawn by each partner
8. Rules regarding operation of bank accounts
9. Division of profits or losses
10. Interest on capital or drawings, if any
11. Interest on partner's loan to the firm
12. Salaries, commission, etc. if payable to any partner
13. Details of division of work among the partners
14. The ascertainment of goodwill on admission, retirement and death of a partner.
15. Settlement of accounts in the event of retirement or death of partners.
16. Settlement of accounts on dissolution of the firm
17. Provisions relating to the maintenance and audit of accounts
18. Provisions for arbitration in the event of disputes
19. Provision regarding borrowings of the firm
20. Rights, duties and liabilities of partners

### Rules applicable in the absence of Partnership Deed / Provisions Relevant for Accounting

In the absence of the partnership deed or if the deed is silent on any matter, the Partnership Act 1932 provides the following:-

1. **Profit Sharing** – The profit or loss should be shared equally among the partners irrespective of their capital contribution.

2. **Interest on Capital** – No interest is payable to the partners. If the deed provides for interest on capital, it should be paid only out of profit and if there is loss, no interest can be allowed.
3. **Interest on loan to the firm** – Partners is entitled to get interest at **6%** p.a. on loans advanced by the partners. It should be paid even if there is loss.
4. **Interest on Drawings** – No interest will be charged on drawings made by the partners.
5. **Remuneration to Partners** – No one is entitled to get salary or commission.

## **PARTNERS' CAPITAL ACCOUNTS**

The transactions relating to partners should be recorded in their capital accounts. Normally each partner's capital account is prepared separately.

*(Proforma of Capital account under Fluctuating Capital Method – refer the text book)*

*Note: All the items which are entitled to the partner is entered in the credit side and all the items which are bound to pay to the firm is entered in the debit side of the capital account)*

There are two methods by which capital accounts of partners can be maintained:-

### **1. FLUCTUATING CAPITAL METHOD**

Under this method only one account is maintained ie, the partner's capital account. In this account all the items affecting partner's capital account is recorded such as interest on capital, interest on drawings, drawings, salary, commissions, share of profit or loss etc. as a result the balance in the capital accounts keeps on fluctuating year after year.

### **2. FIXED CAPITAL METHOD**

In this case two accounts are maintained for each partner, ie; capital account and current account. In capital account the balance remains the same unless some additional capital is introduced or some amount of capital is withdrawn by an agreement among the partners. While all the items such as interest on capital, drawings, interest on drawings, salary, commission, share of profit or loss etc. are recorded in partner's current account and hence the balance of current account is always changing.

*(Proforma of Capital a/c and Current a/c under fixed capital method – refer the text book)*

### **Difference between Fixed Capital and Fluctuating Capital Methods**

<b>FIXED CAPITAL METHOD</b>	<b>FLUCTUATING CAPITAL METHOD</b>
1. Two accounts are maintained, ie, capital a/c and current a/c	1. Only one account ie, capital a/c is prepared.
2. Usually, the amount of capital remains the same year after year.	2. The amount of capital is fluctuating
3. Adjustments like interest on capital, drawings, interest on drawings, etc. are made in the current a/c	3. Adjustments are made in the capital a/c itself.
4. Both the current a/c and the capital a/c are appeared in the Balance Sheet	4. Only the capital a/c appears in the Balance Sheet.
5. It should be specifically mentioned in the deed.	6. It is not necessary.



## Distribution of Profit / Loss among Partners

### Profit and Loss Appropriation Account

The net profit reflected by the profit and loss account of the partnership firm needs certain adjustments for items like interest on capital, interest on drawings, salary, commission to the partners etc. All these items are incorporated in the Profit and Loss Appropriation Account.

This is an extension of profit and loss account and is prepared to show how the net profit has been distributed among the partners. This account should begin with the net profit or net loss brought forward from the profit and loss account (profit on the credit side and if loss on the debit side) as the gross profit transferred from the trading account to the profit and loss account.

Further this account should be debited with all the interest on capital, salary, commission to the partner (incomes to the partner i.e., expense to the firm) and credited with interest on drawings, (expense to the partner, i.e., incomes to the firm). The net profit or loss after making the above adjustments will be divided among the partners in the agreed profit sharing ratio and transferred to their capital accounts or current accounts.

*(Proforma of Profit and Loss Appropriation Account – refer the text book)*

*Note: While solving problems, try to reveal the journal entries from the P/L Appn. Account.*

**Interest on Drawings** – Interest on drawings is to be charged from partners if it is specified in the deed. The interest is calculated by considering the time period involved.

#### Different methods of computing interest on drawings:

1. Amount of withdrawal, rate of interest and the date of withdrawal given,
2. Date of withdrawal not given but the amount and rate of interest given:

In this situation, it is assumed that the drawings were made evenly throughout the year. In such a case interest should be charged for 6 months on the whole amount.

3. Different amounts withdrawn at different Intervals:

In case the dates of drawings and the amounts of drawings are clearly stated, the interest may be calculated with the help of Product Method.

#### Steps-

- i. Calculate the time period between the date of withdrawal and the date of closing the accounts.
- ii. Multiply the period so calculated by the respective amount of drawings, this is called the Product.
- iii. Add up the various products.
- iv. Calculate the interest for one month on the sum of products at the rate of percentage.

4. Fixed amount withdrawn every month:

It is to be noted that if a fixed amount is withdrawn at regular intervals, the interest on drawings can be calculated on the basis of average period, as follows:

- a. If the amount is withdrawn on the first day of every month:

Average Period =  $\frac{\text{Total period in months} + 1}{2}$

$$= \frac{12 + 1}{2} = 6.5 \text{ months}$$



∴ Interest on Drawings = Total Amount x Average Period x 1/12 x Rate of Interest / 100

b. If the amount is withdrawn on the last day of every month:

$$\text{Average Period} = \frac{\text{Total period in months} - 1}{2}$$

$$= \frac{12 - 1}{2} = 5.5 \text{ months}$$

∴ Interest on Drawings = Total Amount x Average Period x 1/12 x Rate of Interest / 100

c. If the amount is withdrawn on the middle of every month:

$$\text{Average Period} = \frac{\text{Total period in months}}{2}$$

$$= 12 / 2 = 6 \text{ months}$$

∴ Interest on Drawings = Total Amount x Average Period x 1/12 x Rate of Interest / 100

5. If the amount is withdrawn at each quarter:

- a. If the amount is withdrawn in the beginning of each quarter (3 months), the average period is 7.5 months.  $(12+3)/2 = 15/2 = 7.5$  months - here 3 indicates number of months in a quarter.
- b. If the amount is withdrawn at the end of each quarter, the average period is 4.5 months.  $(12-3)/2 = 9/2 = 4.5$  months.
- c. If the amount is withdrawn in the middle of each quarter, the average period is 6 months.  $(12/2 = 6)$

XXXXXXXXXXXXX

## RECONSTITUTION OF A PARTNERSHIP FIRM - ADMISSION OF A PARTNER

Reconstitution of a partnership means a change in the nature of relationship among the members, effected through a fresh agreement under which the existing business continues.

### MODES OF RECONSTITUTION

- ❖ Admission of a partner.
- ❖ Change in profit sharing ratio.
- ❖ Retirement of a partner.
- ❖ Death of a partner.

### ADMISSION OF A NEW PARTNER

According to Partnership Act, 1932, a person can be admitted as a new partner with the consent of all the existing partners. Usually a new partner is admitted when the firm needs additional capital or managerial help or both.

While admitting a new partner he acquires the right to share the assets of the firm and to share the future profits of the firm. In order to get the first right the new partner has to bring an agreed amount of capital and for acquiring the second right he has to bring his share of goodwill (also called premium) which will be shared among the old partners, as they sacrifice a part of their profit in favour of the incoming partner.

Following are the accounting treatments at the time of admission:-

1. Capital of the new partner
2. Calculation of new profit sharing ratio.
3. Calculation of sacrificing ratio.
4. Treatment of Goodwill.
5. Revaluation of Assets and Liabilities.
6. Adjustment of reserves and other accumulated profits and losses.
7. Adjustment of capital accounts of the partners.

### Calculation of New Profit Sharing Ratio (Change in Profit Sharing Ratio)

While admitting a new partner it is necessary to find out the new profit sharing ratio as the incoming partner acquires his share of profit from the old partners. The new ratio is determined by considering how the new partner acquires his share of profit from the old partners. The various possibilities are:-

- a) He may acquire it from the old partners in the old ratio.
- b) Equally from the old partners.
- c) At some agreed ratio.
- d) He may acquire it wholly from one or more partners.
- e) He may acquire it in the form of certain fraction of old partners' share in profits. (Eg. A surrendered  $\frac{1}{32}$  of his share and B  $\frac{3}{32}$  of his share in favour of C ).

If the partnership deed is silent regarding this matter, the new partner acquires his share in profits from the old partners in the old ratio, and the old partners continue to share the remaining profits in the old ratio.

## Calculation of Sacrificing Ratio

Sacrificing ratio is the ratio in which the old partners have agreed to sacrifice their share of profits in favour of the new partner. While admitting a new partner, he is required to compensate the old partners for his right to share in the future profits of the firm, if it is made in cash, it can be shared by the old partners in their sacrificing ratio.

$$\text{SACRIFICING RATIO} = \text{OLD RATIO} - \text{NEW RATIO}$$

$$\therefore \text{Sacrificing Share} = \text{Old Share} - \text{New Share}$$

## GOODWILL

Goodwill is the value of reputation of a firm in respect of the profits expected in future over and above the normal profits. Over a period of time a well established business develops an advantage of good name, reputation and wide business connections which help the business to earn more profits. In accounting, the monetary value of such advantage is known as goodwill.

Factors Affecting Goodwill:

- 1. Location of Business** – If it is centrally located in a place having more customer traffic, the goodwill tends to be high.
- 2. Nature of Business** – The firm which produces the products having a stable demand is able to earn more profits and therefore has more goodwill.
- 3. Efficiency of Management** – Based on the efficiency of management the productivity as well as the profitability of an organization be higher and it determines the value of goodwill.
- 4. Time Factor** – A business concern running profitably for a longer period will have more goodwill since it is better known to the customers.
- 5. Market Situation** – The monopoly or limited competition enables the business to earn more profit, which leads to higher goodwill.
- 6. Special Advantages** – Import licenses, well known foreign collaboration, patents, trademarks etc. will help to earn more profit which leads to higher goodwill for the firm.

## Methods of valuation of goodwill

### 1. AVERAGE PROFIT METHOD

Under this method, the goodwill is valued at an agreed number of 'years' purchase of the average profits of the past a few years. It is based on the assumption that a new business will not be able to earn any profits during the first few years of its operations. Eg: Net profit of a business for the last 3 years was Rs. 10000, 20000 and 30000, the partners decided to calculate the goodwill based on 2 years purchase. Therefore, Average Profit =  $(10000 + 20000 + 30000) / 3 = 20000$ . Here goodwill =  $20000 \times 2 = 40000$ .

### 2. SUPER PROFIT METHOD

Goodwill, under this method is considered to be equal to a certain number of year's purchase of the super profits of the business. Super Profits means the excess of the actual profits earned by a business unit over and above the normal return expected on investment in similar class of business.

Super Profit = Actual Profit – Normal Profit.

Normal Profit = Capital Employed x Normal Rate of Return / 100

Goodwill = Super Profit x Number of year's

Note: Actual Profit means Average Profit

## **Treatment of Goodwill**

At the time of admission of a new partner, he gets his share of profit from the existing partners, for which he has to compensate them. For this he has to bring in his share of goodwill (premium) in cash. The goodwill thus brought in by the new partner is shared by the old partners in their sacrificing ratio.

### Accounting Treatment

A. If this amount is paid to the old partners privately, ie; outside the business,

No entry is to be passed in the books of the firm.

B. If the amount is paid through the firm and the same is retained in the business, the following journal entries are to be passed:-

1.     Cash Account                     Dr  
              To Goodwill Account.  
(Amount brought in by the new partner as goodwill)

2.     Goodwill Account                Dr  
              To Old Partners' Capital Account (individually)  
(Goodwill transferred to the old partners' capital account in their sacrificing ratio)

C. If the new partner brings in his share of goodwill in cash and the same in full or part is withdrawn by the old partners, the following entries are to be passed.

Old Partner's Capital Account     Dr  
              To Cash Account  
(The amount of goodwill withdrawn by the old partners)

Alternatively, the cash premium brought in by the new partner may be directly credited to old partners' capital accounts. In such a case only one journal entry is enough instead of the above two entries 1 and 2.

Cash Account                         Dr  
              To Old Partners' Capital Account

(Cash brought in for goodwill by the new partner credited to old partners in their sacrificing ratio)



2. If the revaluation account shows a debit balance, ie; Loss.  
Old Partners' capital account                      Dr  
    To Revaluation account.

*Proforma of Revaluation Account – Refer the Text Book*

## **ADJUSTMENT FOR RESERVES AND ACCUMULATED PROFIT OR LOSS**

At the time of change in profit sharing ratio, some undistributed profits and reserves may stand in the books. It should be shared among the partners in their old profit sharing ratio before reconstitution takes place. This is to be done even if the question is silent in this regard.

Journal Entry:

1. Undistributed profits or Reserves.

Profit and Loss Account	Dr
Reserves Account	Dr
To Old Partners' Capital Account	

2. Undistributed Losses.

Old Partners' Capital Account	Dr
To Profit and Loss Account	

Note:

Workmen's Compensation Fund and Investment Fluctuation Fund etc. are transferred to old partners' capital accounts in their old ratio.

Employees Provident Fund is a liability hence it is to be kept in the liability side of the Balance Sheet after admission

\*\*\*\*\*

## RETIREMENT & DEATH OF A PARTNER

### RETIREMENT

Retirement of a partner means the withdrawal of a partner himself from the business for various reasons such as old age, lack of interest in business etc. A partner can retire from the business either as per the terms of agreement or voluntarily, on retirement he is entitled to get all the sums due to him up to the date of retirement, as well as he is liable for his share in all losses till the date of his retirement.

#### Accounting Aspects on Retirement

1. Change in Profit sharing ratio.
2. Calculation of gaining ratio.
3. Adjustment regarding goodwill.
4. Adjustment of reserves and accumulated profits/losses.
5. Revaluation of assets and liabilities.
6. Ascertainment of profit or loss up to the date of retirement.
7. Calculation of total amount due to the retiring partner.
8. Settlement of total amount due to the retiring partner.
9. Adjustment of capitals of continuing partner.

#### Change in Profit Sharing Ratio

While retiring a partner the profit sharing ratio of the existing partners may be revised. The share of outgoing partner is often acquired by the existing partners in their profit sharing ratio itself, unless otherwise agreed upon ie; the profit sharing ratio among the remaining partners will not change. Suppose, A,B &C share profits in the ratio of 3 : 2 : 1 and B retires, the ratio between A and C will be 3 : 1, whereas if they decide to be equal partners, the new ratio will be 1 : 1.

#### Gaining Ratio

The ratio in which the continuing partners share the profit of outgoing partner is called gaining ratio.

$$\begin{aligned} \text{GAINING RATIO} &= \text{NEW RATIO} - \text{OLD RATIO} \\ \therefore \text{GAINING SHARE} &= \text{NEW SHARE} - \text{OLD SHARE} \end{aligned}$$

#### Revaluation of Assets and Liabilities

Assets and Liabilities are to be revalued at the time of retirement as in the case of admission of a partner. It is to be done, in order to find out the appropriate share of retiring partner in the firm. It can be done through a revaluation account or profit and loss adjustment account and the profit or loss on revaluation is transferred to all the partners' capital accounts in their old ratio.

Accounting treatment – similar to admission of a partner



## Adjustment of Accumulated Profits / Losses

General reserve, profit and loss account credit balance and unused reserves like workmen's compensation fund (in liability side) should be transferred to all partner's capital accounts in their old ratio. Accounting treatment:

General Reserve	A/c	Dr
Workmen's compensation fund	A/c	Dr
Profit and Loss	A/c	Dr
To Partners' capital A/c (individually)		

In case of accumulated loss (debit balance in P/L account) appearing on the assets side;

Partners' Capital A/c	Dr
To Profit and Loss A/c	

Note: In the above cases, Reserves or Profit and Loss account balances should not be shown in the balance sheet prepared immediately after retirement.

Alternatively, only retiring partner's share in these items may be credited (if profit) or debited (if loss) to his capital account.

1. To transfer retiring partner's share of reserve or accumulated profit:

Reserve / Profit and Loss A/c	Dr
To Retiring partner's capital A/c (retiring partner's share only)	

2. To transfer retiring partner's share of accumulated loss:

Retiring partner's capital A/c	Dr
To Profit and Loss A/c (retiring partner's share only)	

Note: Amount of reserve and profit and loss account after deducting retiring partner's share will be shown in the balance sheet prepared immediately after retirement.

These accounts must be transferred to partner/partners' capital accounts even if the question is silent in this regard.

## Disposal of amount due to the retiring partner & Partner's Loan Account

1. **Lump Sum Payment:** The total amount due to the retiring partner shown by his capital account may be paid in full at the time of retirement, the entry will be:

Retiring partner's capital account	Dr
To Cash / Bank	

- 2. Payment in Installments:** If the firm is not in a position to pay off the entire amount in lump sum, the amount due to him is transferred to his loan account and it will be paid in installments along with the interest as per the agreement.

Entry:

Retiring partner's capital a/c                      Dr  
    To Retiring partner's loan account.

Note: This loan amount will be shown on the liability side of the balance after retirement.

As per section 37 of the Indian Partnership Act, the outgoing partner can claim proportionate share in the profit earned on the amount due to him from the date of his retirement to the date of final payment or interest @ 6% per annum at his option.

Each installment consists of Principal amount and Interest at an agreed rate. Interest due on loan is credited to loan account and installments (principal amount plus interest) are paid at agreed intervals.

Journal entries:

- a. For interest due on loan

Interest on loan A/c                      Dr  
    Retired partner's loan A/c

- b. For payment of installments:

Retired partner's loan A/c    Dr  
    To Cash/Bank A/c                      (Principal amount + interest)

- c. For closing interest on loan at the end of financial period

Profit and Loss A/c                      Dr  
    To Interest on loan A/c

Note: 1. The above entries are repeated until the loan account is closed.  
2. Interest on loan is calculated on the outstanding amount of loan.

- 3. Part payment and balance in installments:** In this case, a part payment is made to the retiring partner and the balance amount in the capital account is transferred to retiring partner's loan account.

Entry:

Retiring partner's capital A/c                      Dr                      (Total amount due)  
    To Bank A/c / Cash A/c                      (Part payment made)  
    To Retiring partner's loan A/c                      (Balance amount as loan)

\*\*\*\*\*

**DISSOLUTION OF A PARTNERSHIP FIRM**

According to Section 39 of the Indian Partnership Act, 1932, Dissolution of a firm means the dissolution of partnership between all the partners and no business is being carried out afterwards.

Differences between Dissolution of partnership and Dissolution of a firm

BASIS	DISSOLUTION OF PARTNERSHIP	DISSOLUTION OF FIRM
Meaning	Economic relation between the partners change	Partnership between all the partners of a firm comes to an end.
Termination	The business is not terminated	The business of the firm is completely closed.
Court's intervention	No court intervention	Court may intervene and order for dissolution of firm.
Settlement	Assets and liabilities are revalued and new balance sheet is prepared	Assets are sold, liabilities are paid off and balance utilized towards settlement of partners.
Closure of Books	Books of accounts are not closed	All books of accounts are closed.
Settlement of Assets and Liabilities	Assets and liabilities are revalued	Assets are sold and liabilities are paid off.

**Dissolution of Partnership**

Dissolution of partnership changes the existing relationship between partners but the firm may continue its business as before. It may take place in any of the following ways:

1. Change in profit sharing ratio among partners.
2. Admission of a new partner.
3. Retirement of a partner.
4. Death of a partner
5. Insolvency of a partner.
6. Completion of the venture, if partnership is formed for that.
7. Expiry of the period of partnership, if partnership is for a specific period of time.

**Modes of Dissolution of a firm**

1. Dissolution by agreement (Sec. 40) – A partnership firm may be dissolved when:
  - a. All the partners give consent for dissolution.
  - b. As per the contract between partners.
2. Compulsory dissolution (Sec.41) – A firm is dissolved compulsorily in the following cases:
  - a. Where all the partners or all except one become insolvent or insane.
  - b. Where the business becomes illegal.
  - c. Where all the partners except one decide to retire from the firm.
  - d. Where all the partners or all except one partner die.
3. Dissolution on the happening of certain contingencies (Sec. 42) – In the absence of an agreement to the contrary, a firm will be dissolved in the following cases:
  - a. On the expiry of the term of the firm.
  - b. On the death of a partner.

- c. On the adjudication of a partner as insolvent.
  - d. On the completion of the venture for which the firm was constituted.
4. Dissolution by Notice (Sec. 43)– In case of a partnership at will, the firm may be dissolved by any partner giving a notice in writing to all the other partners of his intention to dissolve the firm.
  5. Dissolution by Court (Sec. 44)– A court may order a partnership firm to be dissolved in case of a suit by a partner in the following cases:
    - a. Where a partner becomes of unsound mind.
    - b. Where a partner becomes permanently incapable of performing his duties as a partner.
    - c. Where a partner commits willful or persistent (continuous) breaches of agreement.
    - d. Where a partner’s conduct is likely to adversely affect the business of the firm.
    - e. Where a partner transfers whole of his interest in the firm to a third party without the consent of the other partners.
    - f. Where the business of the firm cannot be carried on except at a loss.
    - g. Where the court regards dissolution to be just and equitable.

### Journal Entries on Dissolution of a Partnership Firm (Preparation of Realisation Account

The following Journal Entries are required to close the books of the firm:

1. For transfer of assets and Provision against assets.

1. a) All asset accounts excluding cash, bank and the fictitious assets, if any are closed by transfer to the debit of Realisation Account at their book values.

Realisation A/c Dr  
To Assets (Individually) A/c

Note – 1. Fictitious Assets are those assets which are having no marketable values but they are treated only for the sake of convenience, they have existence merely in name, eg. Prepaid expenses, Preliminary expenses, deferred revenue expenses etc.

Note – 2. Sundry debtors should be transferred at its full value without deducting the provision for doubtful debts, if any.

1. b) All the provisions against the assets are closed by transfer to the Realisation account.

Provision for doubtful debts	Dr	
Provision for depreciation		Dr
Joint Life Policy Reserve		Dr
Contingency Reserve	Dr	
To Realisation Account		

2. All liabilities to outsiders are closed by transfer to realisation account at the book value.

Liabilities (Individually) A/c Dr  
To Realisation Account

(Sundry Creditors, Bills Payable, Bank O/d, Outstanding Expenses, Partner’s Wife’s loan etc.)



b. When a partner has agreed to undertake the dissolution work for an agreed remuneration and he bears all the realization expenses:

i) If payment of realization expenses is made by the firm:

Partner's Capital A/c            Dr  
    To Bank A/c

ii) If the partner himself pays the realization expenses:

No Entry.....

iii) For agreed remuneration to that partner:

Realisation A/c                    Dr  
    To Partner's Capital A/c

9. For realization of any unrecorded assets including goodwill, if any:

Bank A/c                            Dr  
    To Realisation A/c

10. For settlement of unrecorded liability:

Realisation A/c                    Dr  
    To Bank A/c

11. To close the realisation account:

a) If it is profit on realisation account:

Realisation Account            Dr  
    To Partners' capital account

b) If it is loss on realisation account:

Partners' capital account      Dr  
    To Realisation Account

12. Other items on the liability side of the balance sheet like reserve fund and credit balance of P&L Account are transferred to the partners' capital accounts directly.

Reserve fund / General Reserve A/c Dr  
P & L Account                            Dr  
    To Partners' Capital Account

13. To transfer fictitious assets, if any, to partners' capital accounts in their profit sharing ratio:

Partners' Capital A/c (individually)      Dr  
    To Fictitious Assets A/c

14. For payment of partner's Loan

Partner's loan account                    Dr  
    To Cash / Bank account





6. If some specific funds like Investment fluctuation fund, Workmen's compensation fund, Joint life policy fund etc. are given they should be credited to realization account. This is because some losses or liabilities are attached to such funds. But general purpose funds such as general reserve, reserve fund etc. are directly credited to capital accounts of partners.
7. Provident fund is usually transferred to the credit side of realization account like other liabilities and it should be paid off through realization account (debit side).

\*\*\*\*\*

## PART – B COMPUTERISED ACCOUNTING SYSTEM

Chapter- 1 (Focus Area 2022)

### Overview of Computerised Accounting System

#### Computerised Accounting System

Computerised Accounting System refers to the process of accounting with the help of Computers and Accounting software. It receives the transactions as its inputs and processes it as per the Accounting Rules and generates various types of reports as we require.

#### Components of CAS

- a. Procedure – A logical sequence of actions to perform a task.
- b. Data - The raw fact for any business application.
- c. People - Users.
- d. Hardware - Computer, associated peripherals and their network.
- e. Software - System software and application software.

#### Features of Computerised Accounting System (CAS)

1. **Simple and Integrated** – Computerised accounting is quite simple and integrates all business operations such as sales, finance, purchase, inventory and manufacturing. With computerized accounting, accurate, up-to-date business information is available at the fingertips.
2. **Accuracy and Speed** – With the help of Computerized accounting, a large volume of data can be processed and reports can be generated with a high speed and accuracy.
3. **Scalability (Flexibility)** – CAS enables to process any volume of data in tune with the changes in the size of the business.
4. **Transparency and control** – CAS provides greater transparency for day to day business operations.
5. **Reliability** – CAS makes sure that the accounting information is accurate and secured.

#### Codification of Accounts

Code is an identification mark. Giving a numerical number or alphabet or both to a particular account for identification is known as Codification of Accounts. For example for the primary code '1' can be given to Asset, '2' to Liabilities, '3' to Income and '4' to Expenditure. Again for fixed assets the code can be given as 1.1 and the current assets can be coded as 1.3. Thus Building under Fixed Assets can be coded as 1.1.1 and Furniture can be coded as 1.1.2, Cash Account can be coded as 1.3.1 and so on...

## Types of Codes

### 1. Sequential Codes

The code is sequential when each succeeding code is one number greater than the preceding code. These codes are primarily applied to source documents such as invoices, cheques etc

<u>Codes</u>	<u>Accounts</u>
AC001	Arun Traders
AC002	Goodluck Furniture Mart
AC003	Rajendra Kumar

### 2. Block Codes

In block code, a range of numbers is partitioned into a desired number of sub ranges and each sub range is allotted to a specific group.

<u>Codes</u>	<u>Account Group</u>
001 – 500	Direct Expense
501 – 1000	Indirect Expense
1001 – 1500	Direct Income
1501 – 2000	Indirect Income

### Mnemonic Codes

The term Mnemonic means a technique for remembering anything more easily. A mnemonic code consists of alphabets or abbreviations as symbols to codify an Account. E.g. Salary Account can be coded as 'SLR', Building Account can be coded as 'BLD', etc.

Other Examples: Trivandrum – TVM, Delhi – DEL, Bangalore – BLR, Kalpetta - KPTA

### Methodology to develop coding structure

Let us examine how to develop a coding structure for each of the students coming under Higher Secondary education department. First of all we have to design a hierarchy of the school system and attributes of the students. It can be as follows

School Code - Year of Admission - Combination Code - Admission No.

The coding for the students will be as follows based on the above consideration

School Code	5 Digits
Year of Admission	2 Digits
Combination Code	2 Digits
Admission No	4 Digits

Thus, if we allocate a 13 digit code to a student who is studying in the school 12020, who got admission in the year 2015 in the combination commerce (39) with Admission No.3456, the code will be as follows:

1202015393456

### **Advantages of CAS**

Following are the advantages of Computerised Accounting System

1. Timely generation of reports and information in desired format.
2. Alterations and addition in transactions are easy and gives changed results instantly

3. Ensures effective control over the system
4. Economy in the processing of accounting data
5. Confidentiality of data is maintained.

### **Limitations of CAS**

Following are the limitations of CAS Software

1. Faster obsolescence of technology necessitates investments in shorter period of time.
2. Data may be lost or corrupted due to power interruptions.
3. Data are prone (subject) to hawking.
4. Un programmed or unspecified reports cannot be generated.

\*\*\*\*\*

## SPREADSHEET

A spreadsheet is a computer program that allows the user to store data in a grid of Rows and Columns. It is used to record, calculate and compare numerical or financial data.

There are a lot of Spreadsheet programs like LibreOffice Calc, MS Excel, Lotus 1-2-3 etc.

**Workbook** – A file that contains one or more worksheets is called a workbook. In this we can enter, store and manipulate data.

**Worksheet** - A page in a workbook is called Worksheet which contains rows and columns.

### Features of LibreOffice Calc

- 1. Easy Calculations** – This software provides a lot of tools to perform complex calculations very easily.
- 2. What-If Calculations** – The users can predict what will happen if certain conditions are changed. Eg. How the changes in interest rates will affect the instalment amount of a loan.
- 3. Serves as a database** – A spreadsheet can be used as a database as we can store a huge volume of data in it.
- 4. Arranging Data** – The data stored in a spreadsheet can be organized or reorganized based on the requirement of the users. Eg: formatting, sorting, filtering etc.
- 5. Dynamic Charts** – With the help of inbuilt charts and graphs, the users can present their data in different manner. Eg: Bar chart, Pie chart etc.

### Components of LibreOffice Calc

- 1. Rows & Columns** – A row is the range of cells that go horizontally in a worksheet. Rows are identified by numbers like 1, 2,3.A column is the range of cells that go vertically in a worksheet. Columns are identified by letters like A, B, C.
- 2. Cell** - The intersection of rows and columns is called Cell. The cell which is clicked is known as **active cell**. **Cell Address** – It is the unique identification of each cell. It is a combination of column name and row number. Eg: A1, B5 etc.
- 3. Range** - Range is a group of selected cells. Ranges are identified by the cell references of the cells in the upper left and lower right corners of the range. For example, the range D1:E10 includes a block of 20 cells starting from D1 and ending to E10.

**Naming a Range** – In spreadsheet, we can assign suitable names for the ranges and these names can be used instead of complicated range references in the formulas and functions.

Eg: Scores obtained by a commerce student in his subjects are given in the range C2:C7. To get the total scores in the cell C8, we have to give a formula in C8 as '= SUM(C2:C7)'. But it is difficult to remember this range reference. Hence we named the range as 'Marks'. Then we can use the formula in C8 as '=SUM(Marks)'.

	A	B	C	D	E	F	G	H	I	J
1		Subject	Scores Obtained							
2		English	76							
3		Malayalam	78							
4		Business Studies	65							
5		Computerised Accounting	72							
6		Economics	69							
7		Computer Application	64							
8		Total Marks	=SUM(Marks)							
9										

## Steps for Naming a Range

- Select the range of cells, that we want to assign name
- Click on 'Data' tab
- Select the 'Define Range' option
- Give name for the range
- Click on OK button

Select the cells – Data – Define Range – Enter the Name - OK

## Spreadsheet Operations

- Open Workbook** – To open a new workbook, Applications – Office – LibreOffice Calc.
- Save a Workbook** – To save a workbook, select the option **Save** or **Save as** from the **File Menu** or by using **Ctrl + S**.
- Close the Workbook** – To close the workbook select the option **Close** from the File Menu.
- Quit LibreOffice Calc** – Select the option Exit LibreOffice from File Menu.
- Add Worksheet** - To **add** a new worksheet, click on the 'Insert Worksheet button' available near to the sheet tab. A new blank worksheet will be created. Alternatively, you can right click on any sheet tab and select "Insert" from the menu. Pressing of 'Shift+F11' buttons also inserts a new sheet.
- Delete Worksheet** - To **delete** an existing sheet, right click on the sheet tab of the desired sheet and select 'Delete' from the menu.
- Rename Worksheet** - By default Calc sheets are named as 'Sheet1', 'Sheet2, etc. To change the name of a worksheet right click on a sheet tab, select "**rename**" and type in a new name followed by the Enter key.

**Components of a Formula** – A formula may have three components, such as Cell Reference, Mathematical Operators and Functions.

**Cell Reference** – A cell reference identifies the location of a cell or group of cells, which is also called cell address. Eg: A1, C10 etc.

**Functions** – A function is a pre-set formula which can be written directly into a cell, to display an outcome. Some examples are given below:

- =Sum(A1:A5) gives the total of the figures in the range
- =Average(A1:A5) gives the average value of the figures in the range
- =Max(A1:A5) gives the Maximum value from the figures in the range

Components of a function in spreadsheet

Initial Operator	Function Name	Arguments
=	Sum	(A1:A5)

### Classification of Functions in Spreadsheet

1. Date and Time Functions
2. Statistical Functions
3. Logical Functions
4. Mathematical Functions
5. Text Manipulation Functions
6. Spreadsheet Functions
7. Financial Functions

### Date and Time Functions

Spreadsheet takes 01/01/1900 as a base for calculating the dates. It assigns a serial number for each date taking 01/01/1900 as 1, 02/01/1900 as 2 etc.

**1. Today** - This function gives the current date in the cell. **Syntax: Today( )**

**2. Now** – It shows the current time along with date **Syntax: Now( )**

**3. DATEVALUE(date\_text)** - This function converts the date into the corresponding value. In LibreOffice Calc 30/12/1899 has been set as the default date with the date value as zero (0). Thus January 1, 2000 has the value as 36526. Its syntax is **=Datevalue(“date”)**. Eg: To find the date value of 15-05-2015, give the formula as **=Datevalue(“15/05/2015”)**. The result will be 42139.

**4. DATE** – This function returns a date when the Year, Month and Day parameters are given.

**Syntax: Date(Year,Month,Day)**

**5. Day(Serial\_number)** – This returns the day of a date ranging from 1 to 31

**Syntax: Day(Serial no.)**

Eg: 1. If we enter **=Day(42139)** in a cell, the result will be 15 as it is the 15<sup>th</sup> day of that month.

2. If A1 = 23/07/2015, the **Day(A1)** will result in 23.

**6. Month(Serial\_number)** – This function returns the serial number of the month. It ranges from 1 to 12. For example in the above case **Month(A1)** returns 7, i.e. the 7<sup>th</sup> month.

**Syntax: Month(A1)**



**7. Year(Serial\_number)** – This function returns the serial number of the year. It ranges from 1900 to 9999. For example in the above case Year(A1) results in 2015. I.e; the 2015<sup>th</sup> year.

**Syntax : Year(A1)**

## Statistical Functions

**1. COUNT( )** – This function will count cells that contain numbers or count the numbers given in the arguments separated by commas.

**Syntax:** =Count (Value1, Value2, Value3.....)

Eg: 1. =Count(25,38,450,365,12) Results 5

2. =Count(A1:A10) gives the count of cells in the range A1 to A10, that contain numbers

**2. COUNTA( )** – This function counts the number of cells that contain any type of data such as numbers, formula (with or without result), text etc. It doesn't count empty cells.

**Syntax:** =Counta(Range of cells) Eg: =Counta(A1:E10)

**3. COUNTBLANK( )** – This function counts the number of cells which are empty in a range. It is an opposite function of COUNTA. A cell that contains formula is not treated as empty, even if its result is empty.

**Syntax:** =Countblank(Range of cells) Eg: =Countblank(A1:E10)

**4. COUNTIF( )** – This function is used to count the number of cells that meet a criteria. The criteria can be a number, expression, cell reference, or text string. For example, you can use a number like 32, a comparison like ">32", a cell like B44, or a word like "apples".

**Syntax:** =Countif(Range,Criteria) Eg: =Countif(A1:A10,">=90")

Apply all the above Count functions based on the given table.

	A	B	C	D
1	105	APPLE		LAPTOP
2	FLOWER	70	MANGO	500
3	APPLE		45	
4		850	RED	APPLE

## Logical Functions

A logical function can return only one of two values: TRUE or FALSE

**1. If - IF** returns one value if the condition is true, and another value if the condition is false.

**Syntax:** =IF(logical\_test, value\_if\_true, value\_if\_false)

Logical test = The condition that is determined to be true or false

Value if true = If the condition is true, this value will be returned

Value if false = If the condition is false, this value will be returned

The operators in the logical\_test of the **IF** function may be:

=	Equals to	<>	Not Equals to	>	Greater than
>=	Greater than or Equals to	<	Less than	<=	Less than or Equals to

Examples:

- 1) =If(B1="Male","He","She") Results - "He"
- 2) =If(B2>=18,"Adult","Child") Results - "Child"
- 3) =if(B3<20000,B3\*10%,B3\*20%) Results – 5000
- 4) =if(B4>=18,"Passed","Failed")  
Results – "Passed"
1. 5) =if(B5>300000,"Rich","Poor")  
2. Results – "Rich"
- 6) =if(B3<50000,100,50) Results – 100
- 7) =if(B4<>30,1,2) Results -1

	A	B
1	Gender	Male
2	Age	16
3	Basic Salary	25000
4	Mark of Computerised Accounting	32
5	Annual Income	360000
6		

## 2. Nested IF

The IF function can be nested, when we have multiple conditions to meet. The FALSE value is being replaced by another If function to make a further test.

**Syntax:** =IF(Condition\_1,Value\_if\_True\_1,(Condition\_2,Value\_if\_True\_2,Value\_if\_False\_2))

Eg: 1. =if(A1=1,"Average",if(A1=2,"Good","Very Good"))

At first the formula checks the first condition i.e. whether the cell contains the value 1 or not. If it contains '1' the condition becomes true, it gives the result 'Average' and stops the formula.

But if the cell A1 does not contain the value '1' the condition results FALSE. Then instead of giving a value for the FALSE, it starts checking another condition i.e. whether it contains the value 2.

If the second condition satisfies it gives the result "Good". Otherwise it gives the result "Very Good". In this way we can nest up to 64 ifs in spreadsheet.

Remember to close all if statement by putting as many closing brackets at the end of the statement based on the number of IF Statements.

Eg: 2. Grade Calculation =IF(A1>89,"A+",IF(A1>79,"A",IF(A1>69,"B+","D")))

## 3. AND

It checks more than one condition at the same time and returns TRUE if all the conditions are satisfied. Otherwise it returns FALSE.

**Syntax:** =AND(Condition 1, Condition 2.....Condition 255)

Eg:

=AND(B1>200000, B2>35000) Returns FALSE  
(Because 2<sup>nd</sup> condition not satisfied)

=AND(B2<10000, B3>25000) Returns FALSE  
(Because both conditions are not satisfied)

=AND(A1="Sales", B3<60000) Returns TRUE (Because both conditions are satisfied)

	A	B
1	Sales	325000
2	Gross Profit	30000
3	Net Profit	24000

=AND(A2="Gross Profit", B2=32000, B3<25000) Returns FALSE (Because one condition is not satisfied)

AND Function will be more useful when it is combined with IF Function. Consider the following examples based on the above table.

=if(AND(B1>250000,B2<50,000,B3=24000),"Yes","No")

This function checks three conditions and returns the result. They are:

- (1) Is the value in B1 is greater than 250000
- (2) Is the value in B2 is less than 50000
- (3) Is the value in B3 is equal to 24000

**4. OR** – If any of the argument is true, it return the result **True** and if all the arguments are wrong, it returns the result as **False**.

**Syntax:** Or(logical test 1, logical test 2, ..... logical test 255)

Eg: =Or(B1>200000,B2=30000) The result will be True as the first condition is correct.

## Mathematical Functions

**1. SUM( )** – This function adds together a supplied set of numbers or numbers in a given range and returns the sum of these values.

Syntax: 1. =Sum(10,20,40) 2. =Sum(A1,A2,A3) 3. =Sum(A1:A3)

**2. SUMIF( )** – This function adds all numbers in a range of cells, only if it meets the given criteria.

Syntax: =Sumif(Range,Criteria,Sum\_range)

Range = The range of cells in which the criteria is to be applied.

Criteria = The condition by which the cells to be added.

Sum-range = The actual cells to be added in the range.

E.g. 1. =SUMIF(A1:A10,">50")

E.g.2. =SUMIF(B2:B7,"Salesman",C2:C7) This function will add the data in C2 to C7, only if the corresponding data in B2 to B7 is "Salesman".

	A	B	C
1	Name of Employee	Designation	Salary
2	Ajith	Manager	65000
3	Biji	Salesman	35000
4	Chandran	Manager	40000
5	Darvin	Salesman	18000
6	Eldo	Salesman	35000
7	Farhan	Manager	32000
8			
9	Total Salary of Salesmen		88000

**3. ROUND( )** – This function rounds a number to a specified number of digits following normal rounding rules, i.e.; round down if the decimal portion is < 5, and round up if the decimal portion is 5.

**Syntax : =Round(Number, count)**

Number = The number that we want to round.

Count = The number of digits to which we want to round the number.

Eg: =Round(210.5633,2) The result will be 210.56

Num_digits	-3	-2	-1	0	1	2	3
Rounds to	Nearest 1000	Nearest 100	Nearest 10	Nearest 1	1 Decimal	2 Decimal	3 Decimal
Examples	2795.285	1885.81	412.654	528.654	32.654	185.9214	5.1478
Result	3000	1900	410	529	32.7	185.92	5.148

**4. ROUNDUP( )** – This function always round a number to upward, without considering the value next to the rounding digit.

Syntax: =Roundup(number, count)

Eg: 1. =Roundup(85.462,2) results in 85.47

2. =Roundup(85.462,0) results in 86

3. =Roundup(1430,-3) results in 2000

**5. ROUNDDOWN( )** – This function always round a number to downward, without considering the value next to the rounding digit.

Syntax: =Rounddown(number, count)

Eg: 1. =Rounddown(85.462,2) results in 85.46

2. =Rounddown(85.462,0) results in 85

3. =Rounddown(1430,-3) results in 1000

\*\*\*\*\*

## USE OF SPREADSHEET IN BUSINESS APPLICATIONS

Spreadsheet can be used for a number of purposes in business, some of them are Payroll Accounting, Asset Management and Loan Repayment Schedule.

### Payroll Accounting

Payroll is the statement prepared by every organisation to show the detailed salary calculation.

#### Components of Payroll

1. **Basic Pay (BP):** It is the pay in the pay scale plus Grade Pay, but doesn't include special pay.
2. **Grade Pay (GP):** It is the pay to be added to Basic Pay according to the designation of the employee. Eg. An amount added to the BP on completing 15 years of service.
3. **Dearness Pay (DP):** It is the portion of Dearness Allowance which has been declared and deemed to have been merged with Basic Pay.
4. **Dearness Allowance (DA):** It is the compensation for reduction in the purchasing power of money due to price rise. It is granted by Govt. periodically as a percentage of Basic Pay + Dearness Pay.
5. **House Rent Allowance (HRA):** It is an amount paid to facilitate employee in acquiring rental accommodation.
6. **Transport Allowance (TA / TRA) :** Transport allowance granted to employee for the purpose of travelling between place of duty and residence.
7. **Any other Earnings (AOE):** It includes Education Allowance, Medical Allowance, Washing Allowance etc.

#### Deductions : –

1. **Professional Tax (PT):** It is a statutory deduction according to the legislature of State Governments.
2. **Provident Fund (PF):** It is a statutory deduction as a part of social security. It is deducted as certain percentage of Basic Pay + Dearness Pay.
3. **Tax Deductions at Source (TDS):** It is a statutory deduction. It is the monthly instalment of total Income Tax payable during the year.
4. **Recovery of Loan Instalment (LOAN):** Deduction towards loan provided by the employer to the employee.
5. **Any other Deductions (AOD) :** Any other deductions made towards 'Advance against Salary', 'Food Grains Advance', 'Festival Advance' etc.

### Asset Accounting

Asset accounting means recording values of assets after depreciation. Assets are the properties of a business which are acquired for the purpose of earning income. Assets can be classified into Fixed Assets and current Assets. Fixed Assets are long-term assets and provide productive capability of the business. It includes both tangible and intangible assets. Buildings, Land, Plant, Machinery, Furniture, Goodwill etc. are examples of Fixed Assets.

Depreciation should be charged on fixed assets so as to recoup the amount spent on fixed assets. Depreciation is charged on fixed assets as per the policy of the organization. Normally there are two methods for charging depreciation; they are Straight Line Method and Written Down Value method.

## Straight Line Method

Under this method fixed amount of depreciation is charged on asset every year. The following is the formula for computation of depreciation under this method.

**Syntax: =SLN(Cost, Salvage, Life)**

- **Cost** – Purchase Value + Other Expenses such as Transportation charges, installation charges, Pre-operating expenses etc.
- **Salvage** – Scrap value after the life of asset.
- **Life** – It indicates the life period of asset.

Eg. An asset purchased for Rs. 9,000 and its installation cost is Rs. 1,000. The useful life of the asset is 10 years, at the end of which it will bring a salvage value of Rs.2,000.

These details can be applied in SLN Function to calculate Straight Line Depreciation as follows:-

=SLN(10000,2000,10)      The result is Rs.800

## Written Down Value Method (WDV)

Written Down Value method uses the current book value as the base for calculating depreciation for the next period. It is also called Declining Balance method or Diminishing Balance method . In spreadsheet the DB() function is used to calculate depreciation under Written Down Value method.

**Syntax: =DB(cost, salvage, life, period, months)**

- **Cost** – The original cost of the asset.
- **Salvage** – The salvage value after the life period.
- **Life** – Life period of asset.
- **Period** – The year for which the depreciation is calculated, say 1<sup>st</sup> year , 5<sup>th</sup> year etc.
- **Months** – (This is Optional) It is the number of months in the first year, it is applicable only if the asset is purchased in the middle of the year. If this parameter is omitted, the DB function will assume that there are 12 months in 1<sup>st</sup> year.

### Example-1

An asset that costs Rs. 1,00,000. The salvage value is Rs.8,000. It has an effective life of 10 years. The depreciation for the first year, assuming that there are 12 months in first year (i.e.; the asset was purchased on the opening day of the financial year) is calculated by the following formula:

=DB(100000,8000,10,1,12)

### Example-2

An asset that costs Rs. 50,000. The salvage value is Rs.2,000. It has an effective life of 8 years. The depreciation for the second year, assuming that there are 12 months in first year (i.e.; the asset was purchased on the opening day of the financial year) is calculated by the following formula:

=DB(50000,2000,8,2,12)

### Example-3

An asset that costs Rs. 20,000. The salvage value is Rs.1000. It has an effective life of 5 years. The depreciation for the third year, assuming that there are 4 months in first year (i.e.; the asset was purchased after 8 months) is calculated by the following formula:

=DB(20000,1000,5,3,4)

\*\*\*\*\*

## GRAPHS AND CHARTS FOR BUSINESS

Charts and graphs are used to make information clear and easier to understand. A good picture is worth a thousand numbers. Spreadsheet offers many types of charts including: Column, Line, Pie, Bar, Area, Scatter and more.

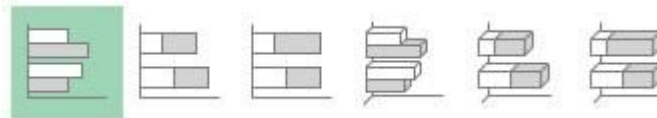
### Types of Charts in Spreadsheet

Spreadsheet provides wide variety of charts to express the data more meaningfully. Following are the most widely used charts.

**Column Chart** : In the column chart, categories are displayed horizontally and values vertically. Column chart works well when we want to compare data sets between each other.



**Bar Chart** : The bar chart is similar to the column chart, with the difference being that the data series are displayed horizontally and not vertically. Similar to the column chart, in the bar chart we can compare one or more data series.



**Pie Chart** : The pie chart contains only one data series. A series of data in a pie chart is displayed as a percentage of the total.



### Steps to Create Charts

1. Enter the data in a spreadsheet with column headers and row headers.

	A	B	C	D	E
1	Sales figures for 4 months				
2	Products	Jan	Feb	Mar	Apr
3	Washing Powder	125000	200000	160000	21000
4	Bath Soap	85000	90000	120000	100000
5	Washing Soap	38000	42000	40000	50000

2. Select the data including column headers and row headers if necessary.

3. Insert – Chart – Chart Type – Next.

4. Data Range – Tick the options **First row as label** and **First column as label**.

5. Click on Finish.



## Elements of a Chart



- **Chart Area** – Entire area of the chart, which includes labels, data, axis etc.
- **Plot Area** – It is the area in which the actual data is plotted.
- **Data Point** – A symbol that represents the data, it may be a bar, pie, line, bubble etc.
- **Data Series** – A group of data points.
- **Axis** – A line that serves as a major reference for plotting data. X-axis, Y-axis and Z-axis.
- **Tick Mark** – A small line intersecting an axis.
- **Grid lines** – Optional lines extending from tick marks across the plot area.
- **Chart Text** – A label or title added to the chart. Eg. Chart Title, Vertical Axis Title, Horizontal Axis Title etc.
- **Legend** – They are the indicators of data items. It is shown in the form of colours or symbols.

## Advantages of using Graphs and Charts

1. Visually appealing
2. Easy to read the data
3. Quick analysis and interpretation of data with a little time
4. To know the trends easily
5. To grasp the data quickly
6. A large volume of information can be exhibited through charts easily

\*\*\*\*\*

## ACCOUNTING SOFTWARE – GNUKhata

When the size and operations of a business increases, the transactions cannot be recorded and processed manually. Here comes the role of computers in accounting with which we can process huge volume of transactions using certain application software called accounting software. Now a days even small scale business organisations can make use of accounting software.

### Commonly used Accounting Software

A number of computerised accounting software are available according to the need and use of business organisations which includes **GNUKhata**, SAP, Tata Ex, Peachtree, Daceasy, Tally, Fresh books, Quick books, Zoho books, Wave etc.

### GNUKhata

GNUKhata (pronounced as *jee\_new\_khata*) developed by Digital Freedom Foundation, a public charitable trust, in association with International Centre for Free and Open Source Software (ICFOSS). It supports a wide range of applications related with accounting and inventory management. It can be easily transformed into different Indian languages.

### Steps for preparing final accounts using GNUKhata

1. Create Organisation.
2. Create admin and login.
3. Create sub-groups if necessary.
4. Create ledger accounts.
5. Voucher entry.
6. Enter Opening Stock and Closing Stock.
7. Display ledger accounts.
8. Display trial balance.
9. Display P&L Account.
10. Display Balance sheet.

To run GNUKhata:           **Applications   Office   GNUKhata**

**Create Organisation** – An organisation means an entity which aims either for profit or not for profit.

Create organisation    Enter the name and other details    Proceed

**Create Admin** – After creating organisation, it is mandatory to 'Create Admin'. Fill all the fields such as User name, Password, Confirm password, Security question and Answer to security question. Then click on 'Create & Login' to save the admin details.

### System Generated Ledger Accounts

When an organisation is created the software automatically creates the following ledgers. These accounts can neither be modified nor deleted.

Sl.No.	Account Name	Group Name	Sub-Group Name
1	Closing Stock	Current Assets	Inventory
2	Opening Stock	Direct Expenses	None

3	Profit & Loss Account (For Profit Making Organizations:) Or Income & Expenditure Account (For Not for Profit Organizations )	Direct Income	None
4	Stock at the Beginning	Current Assets	Inventory

**Ledger Creation** – To create a ledger account select the option **Create Account** from **Master Menu**. While creating ledger account only accounts relating to Balance Sheet group will have opening balances. There is no need to enter opening balances for income and expense account. Multiple ledger accounts can be created by giving a check mark ( ) on “Create Multiple Accounts”.

### Voucher Entry

Recording transactions through voucher interface is called voucher entry. The voucher entries are made on the basis of concerned source documents. While recording a transaction through the voucher, the account to be debited and credited along with the amount and its narration should be given. We can add any number of debits and credits in a voucher entry.

### Types of Vouchers

GNUKhatra offers the following pre-defined voucher types. We cannot create a new voucher type as it is not required.

Voucher Type	Used To Record	Short cut Keys
Receipts	To record receipt of cash or cheque	F4
Payments	All payment made by cash or cheque	F5
Sales	Cash and credit sales of goods	F6
Purchase	Cash and credit purchase of goods or raw materials	F7
Contra	Deposits or withdrawals of cash from bank or transfer of funds from one bank to another and transfer of cash to petty cash	F8
Journal	Rectification entries or transfer or adjustment entries purchase or sale of fixed assets on credit	F9
Sales Return	Return of goods by a customer	Ctrl+1
Purchase Return	Return of goods to supplier	Ctrl+2
Credit Note	Reduction in the amount due from a customer or for allowances	Ctrl+3
Debit Note	Reduction in the amount payable to a supplier or for allowances	Ctrl+4

\*\*\*\*\*

## DATABASE MANAGEMENT SYSTEM FOR ACCOUNTING

Database Management System (DBMS) such as LibreOffice Base, Oracle, SQL Server etc. provides a variety of software tools for storing, organising, processing and querying data very easily.

**Data** – Data are facts and figures about people, objects, entities or events.

**Database** – It is a collection of data that is stored and used for multiple purposes. Eg. Telephone directory, admission register, stock register of a business enterprise etc.

### LibreOffice Base and its components

It is one of the popularly used Database Management System (DBMS) to create, store and manage database. It has the following objects or components.

1. **Tables** – Tables allows a database designer to create the data tables with their respective field names, data types and its properties.
2. **Queries** – This component is used to retrieve filtered data and information from the table and to include computation fields.
3. **Forms** - It allows the front end user for entering data to a database file. It also facilitates displaying, updating and deleting the data.
4. **Reports**: This is used to create various reports by using the data from tables and queries. It is used to present selected set of contents in a format.

### Creation of Table in Design View

1. Open LibreOffice Base: Applications – Office – LibreOffice Base
2. Creating Tables in LibreOffice Base: Click on Tables – Create table in design view – Enter the field Name - Field Type – Description (optional) – Set the Primary Key – Save.

**Primary Key** : After defining all the columns of the table, the primary key column of the table can be specified as any of the columns that are expected to have unique data values.

To set Primary Key: Select the field – Right Click – Select Primary Key

**Entering data into Table** – Double click on table icon – Enter the data.

\*\*\*\*\*

*Prepared by:*

**Ajith Kanthi @ Ajith P P**

SKMJ HSS Kalpetta Wayanad

Ph: 9446162771, 7907712665