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 the 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 in to 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 1st year , 5th 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 1st 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)

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