DEPRECIATION

METHOD OF DEPRECIATION

3. SUM OF YEAR DIGIT

The method is also termed as SYD method. Under this method the value of deprecation for each year is computed based on the ratio between remaining years of uses of asset over sum of years digit.

The formula for calculating the amount of depreciation is as follows

$$\text{Depreciation} = \frac{\text{Remaining life of the asset (including current year)}}{\text{Sum of year digit (SYD)}} X\ Cost\ of\ asset \text{ (cost – residual value)}$$

Example

Shas ltd bought a machine for TZS 20,000 having useful life of 3 years. From the above particulars, you are required to calculate depreciation under sum of year's digits method.

Solution

EXAMPLE 2

On 10 August 2013 Joblot, a computer software retailer, bought a fixed asset which cost TZS100,000. It had an anticipated life of five years and an estimated residual value of TZS 20,000. . From the above particulars, you are required to calculate depreciation under sum of year's digits method.

4. Revaluation method

This method is specially designed to revalue the assets in the case of livestock, loose tools, patents and lands.. under this method the value of deprecation is calculated by taking initially value of an asset less ending value (opening stock + purchases – closing stock).

DOUBLE ENTRY RECORDS FOR DEPRECIATION

There are two accounts used in recording depreciation value ie **ASSET ACCOUNT** and **PROVISION FOR DEPRECITIAN ACCOUNT**

JOURNAL ENTRIES

1. **When asset was bought/purchases**
   Dr: Non current account
   CR: Cash/bank account OR supplier's account (if bought on credit)
2. **For recording the value of depreciation at the end of each year**
   Dr: Income statement
   Cr: Provision for depreciation account

NON CURRENT ACCOUNT

These includes of such accounts such as Furniture account, motor van account, machines account, e.tc. Non-current account are always maintained at its **original cost** (price of asset paid for).

PROVISION FOR DEPRECIATION ACCOUNT

This account used to records depreciation charge of each year. The value of depreciation of each year is credited in this account and transfer to income statement at the end of account year.

The amount of accumulative depreciation then will be deducted from the cost of asset on financial statement at the end of each year. Then financial position will be as:

STATEMENT OF FINANCIAL POSITION FOR THE YEAR ENDED ……

Non-current asset

Asset at cost ……………………………………………………………xxx

Less: provision for depreciation (accumulative) ………………………… xxxx

NET BOOK VALUE …………………………………………… XXX

Example 1.

A bus is bought for TZS 56,000 on 1st jan 2013. It will be used for four years, and then sold back to the supplier for TZS18, 000. A firm charged depreciation using reducing balance method with a rate of 25%. for the year ended 31st dec 2013,2014, and 2015: Show how the above entry will be appeal on

i. Bus account
ii. Provision for depreciation account.
iii. income statement and statement of position for each year (extract)

solution

leave a space for solution not less than half page

Example 2

A printer costs TZS 800,000 was bought on 31st may 2005. It will be kept for five years and then scrapped for TZS 200,000. By using straight line, show above entries will appeal for the year ended 31st dec 2005, 2006,and 2007 on

i. Printer account
ii. Provision for depreciation account.
iii. income statement and statement of position for each year (extract)

solution

leave a space for solution not less than half page

Example 3

A company, which makes up its financial statements annually to 31 December, provides for depreciation of its machinery at the rate of 15% per annum using the reducing balance method.

On 31 December 2018, the machinery consisted of three items purchased as shown:

		TZS
On 1 January 2016	Machine A	Cost 2,000
On 1 September 2017	Machine B	Cost 4,000
On 1 May 2018	Machine C	Cost 3,000

For the year ended 31st Dec, 2016, 2017,and 2018 show

i. Machine account
ii. Provision for depreciation account.
iii. income statement and statement of position for each year (extract)

solution

leave one page for solution

ASSIGMENT

1. A machine is bought on 1 January 2015 for TZS 1,000 and another one on 1 October 2016 for TZS1,200.
   The business's financial year ends on 31 December. The machinery is to be depreciated at 10%, using the straight line method. For the year ended 31st Dec,2015,2016 and 2017 open:

   i. Machine account
   ii. Provision for depreciationaccount.
   iii. income statement and statement of position for each year (extract)

2. A business with its financial year end being 31 December buys two vans on 1 January 2011, No 1 for TZS 8,000 and No 2 for TZS 5,000. It also buys another van, No 3, on 1 July 2013 for TZS 9,000 and another, No 4, on 1 October 2013 for TZS 7,200. Depreciation is on the straight line basis, 20% per annum, ignoring scrap value in this particular case when calculating depreciation per annum.

   For the years ended 31 December 2011, 2012, 2013, 2014, and 2015, Show:

i. van account
ii. Provision for depreciation account.
iii. income statement and statement of position for each year (extract)

DISPOSAL OF NON-CURRENT ASSET

Disposal of non-current asset this is the process of written off the value of non-current asset in the books of accounts due to:

1. Asset discarded; means an asset's life span reach at the end (NBV is zero) or
2. Asset sold out

Then; on written off the value of non-current asset, Disposal account is used

Journal entries

Written off the value of asset on non-current asset

Dr: disposal account

Cr: non-current asset account

Written off the value of accumulative depreciation value

Dr: provision for depreciation account

Cr: disposal account

For cash received when asset sold

Dr: cash/bank account

Cr: disposal account

Recognition of profit or loss on disposal

If profit; Dr; disposal accont

Cr: income statement account

If loss; dr: income statement account

Cr: disposal account

Example

A machine is bought on 1 January 2015 for TZS 1,000 and another one on 1 October 2016 for TZS1, 200. The first machine is sold on 30 June 2017 for TZS720. The business's financial year ends on 31 December. The machinery is to be depreciated at 10%, using the straight line method. For the year ended 31st Dec,2015,2016 and 2017 open:

i. Machine account
ii. Provision for depreciationaccount.
iii. Disposal account
iv. income statement and statement of position for each year (extract)

solution

leave one page for solution

Example 2

A business with its financial year end being 31 December buys two vans on 1 January 2011, No 1 for TZS 8,000 and No 2 for TZS5,000. It also buys another van, No 3, on 1 July 2013 for TZS9,000 and another, No 4, on 1 October 2013 for TZS7,200.

The first two vans are sold, No 1 for TZS2,290 on 30 September 2014, and No 2 for scrap for TZS 50 on 30 June 2015. Depreciation is on the reducing balance method, 20% p.a dates. For the years ended 31 December 2011, 2012, 2013, 2014, and 2015, Show:

i. van account
ii. Provision for depreciation account.
iii. Disposal account
iv. income statement and statement of position for each year (extract)

DEPRECIATION POLICY

There are two main policies of calculating depreciation provisions for assets bought or sold during an accounting period.

1. **Ignore the dates during the accounting period that the assets were bought or sold**, and simply calculate a full period's depreciation on the assets in use at the end of the period.

Thus, assets sold during the accounting period will have had no provision for depreciation made for that

2. **Provide for depreciation on the basis of 'one month's ownership**

Note: if the question is silent, 2nd policy is used.

Example 3

A machine is bought on 1 January 2015 for TZS 21,000 and another one on 1 September 2016 for TZS1, 200. The first machine is sold on 30 June 2017 for TZS 1,720. The business's financial year ends on 31 December. The machinery is to be depreciated at 10%, using the straight line method. Machinery in existence at the end of each year is to be depreciated for a full year. No depreciation is to be charged on any machinery disposed of during the year. For the year ended 31st Dec, 2015,2016, and 2017, open

i. Machine account
ii. Provision for depreciation account
iii. Disposal account

Example 4

Mavron plc owned the following motor vehicles as at 1 April 2016:

Motor Vehicle	*Date Acquired*	*Cost TZS*	*Estimated Residual Value* TZS	*Estimated Life (years)*
AAT 101	1 October 2013	8,500	2,500	5
DJH 202	1 April 2014	12,000	2,000	8

Mavron plc's policy is to provide at the end of each financial year depreciation using the straight line method applied on a month-by-month basis on all motor vehicles used during the year.

During the financial year ended 31 March 2017 the following occurred:

a) On 30 June 2016 AAT 101 was sold for TZS 5,000, and replaced by KGC 303 cost TZS15,000 KGC 303 is expected to have a residual value of TZS 4,000 after an estimated economic life of 5 years.

b) The estimated remaining economic life of DJH 202 was reduced from 6 years to 4 years with no change in the estimated residual value. For the year ended 31 March 2017 open:

i. Motor vehicle account

ii. Provision for depreciation account

iii. Disposal account

iv. Statement of financial position for the year ended 31 March 2017

Assignment

1. A company starts in business on 1 January 2013, the financial year end being 31 December. It have the following transactions

. The machinery bought was:

2013 1 January	1 machine costing	TZS1,400
2014 1 July	2 machines costing	TZS 600 each
1 October	1 machine cost TZS 1,000	
2016 1 April	1 machine was sold for cash TZS 800	

Depreciation is over ten years, using the straight line method, machines being depreciated for the proportion of the year that they are owned

You are to show:

(*a*) The machinery account.

(*b*) The provision for depreciation account.

(c) disposal account

(*c*) statement of financial position for each of the years 2013, 2014, 2015, 2016

2. A company maintains its fixed assets at cost. Depreciation provision accounts, one for each type of asset, are in use. Machinery is to be depreciated at the rate of 15% per annum, and fixtures at the rate of 5% per annum, using the reducing balance method. Depreciation is to be calculated on assets in existence at the end of each year, giving a full year's depreciation even though the asset was bought part of the way through the year, and non in year of disosal. The following transactions in assets have taken place:

2015 1 January	Bought machinery A for TZS 2,800, fixtures TZS 290
1 July	Bought fixtures TZS 620
2016 1 October	Bought machinery B TZS 3,500
1 December	Bought fixtures TZS130

2017 31^{st} june sale machine A fot cash amount TZS 1500

The financial year end of the business is 31 December.

You are to show:

a. The machinery account.
b. The fixtures account.
c. The two separate provision for depreciation accounts.
d. Disposal account
e. statement of financial position for the year ended 31 December 2015, 2016, and 2017

3. A company maintains its fixed assets at cost. Depreciation provision accounts for each asset are kept.

At 31 December 2018 the position was as follows:

	Total cost to date	*Total depreciation to date*
Machinery	94,500	28,350
Office furniture	3,200	1,280

The following additions were made during the financial year ended 31 December 2019:
Machinery TZS16,000, office furniture TZS460.

A machine bought in 2015 for TZS1,600 was sold for TZS 360 during the year. The rates of depreciation are: Machinery 20%, office furniture 10%, using the straight line basis, calculated on the assets in existence at the end of each financial year irrespective of the date of purchase. For the year ended 31st Dec 2019 show:

a) Machinery account

b) Provision for depreciation for each asset

c) Disposal account

d) Statement of financial position for the year ended 31st Dec 2019

BAD DEBTS, PROVISION FOR DOUDTFUL DEBTS, AND PROVISION FOR DISCOUNTS ON DEBTORS

BAD DEBTS

- These are debts which are not been paid for a long period of time
- Bad debts are normal business risks and are charged to income statement as Expenses.
- Bad debts leads to reduce the amount of debtors; i.e. it's credit on Debtors Account

REASONS FOR WRITE-OFF BAD DEBTS

i. The debtor may be refusing to pay one of a number of invoices
ii. The debtor's business has failed and nothing is ever likely to be received "Bankruptcy of a debtors"
iii. After they have been outstanding for a long time as learnt from expenses.

Double entries to records Bad debts

DR: Bad debts account

CR: Debtors account

And then, in transfer Bad debts to income statement

DR: Income statement

CR: Bad debts account

Bad debts account: This expense account is used when a debt is believed to be irrecoverable and is written off

INCOME STATEMENT FOR THE YEAR ENDED……

Gross profit		xxxx
Add: income		xxxx
Less: expenses		
Bad debts	xxx	

Example

P.Y Ltd had balance of debtors of TZS 300,000. During the year TZS 100,000 was written as bad

Showa the account entries to P.Y Ltd

PROVISION FOR DOUDTFUL DEBT

- Provision is amount set aside for unforeseen event in the business such as bad debt or depreciation of non-current asset.
- Doubtful Debts. These are debts remaining at the end of year after deducting bad debts from debtors. They terms as doubtful debts because they are likely to finish up as bad debts.

Doubtful debt = (Debtors – Bad debts)

- Provision for doubtful debt is an estimated amount set aside from income statement for doubtful debt

Why provision is needed

i. To charge as an Expense in the income statement for that year on amount representing debts that will never be paid
ii. To show the statement of financial position a debtors figure as close as possible to the true value of debtors at the statement of financial position date.

Formula:

Provision for doubtful debt = (Debtors – Bad debts) x % of provision

Accounting entries for provisions for doubtful debts

The accounting entries needed for the **provision for doubtful debts** are:

Year in which provision is *first* made:

DR: Income statement with the amount of the provision
CR: *Provision for Doubtful Debts Account*.

Provision for doubtful debts account:
This account is used only to record an estimates amount of the debtors remaining at the end of year after the bad debts have been written off.
(This account is also known as the 'provision for *bad* debts account'.)

Example 1.

At 31st Dec 2013, the debtors amount was TZS 15,000 and the amount of bad debts was TZS 5,000. It estimate that 2% of debts will eventually provide to be bad debts, and it is decide to make a provision for these.

Require: show accounts entries as will appear:

INCREASE PROVISION FRO DOUBTFUL DEBTS

This is when an estimate provision for doubtful for current year is exceed the amount estimated in previous year. This may be due to amount of debtors are increase compare to previous year. The amount increases will be cost to the business and will be treated **as expenses** in income statement

If this happens account entries will be as follows:

DR: Income statement (with actual amount increased)

CR: Provision for Doubtful debt

Illustration:

INCOME STATEMENT FOR THE YEAR ENDED……

Gross profit		xxxx
Add: income		xxxx
Less: expenses		
Provision for doubtful debts	xxxx	
Bad debts	xxx	

Example:

From previous example, on 31st Dec 2014 the amount of debtor after deduct bad debts was TZS 12,000. The provion for doubtful debt remain 2% on debtors.

Require show necessary entries

REDUCING THE PROVISION

This is when an estimate provision for doubtful debt for current year is less than the amount estimated in previous year. This may be due to amount of debtors are decreasing compare to previous year. The amount decreases will be benefit to the business and will be treated **as income** in income statement

If this happens account entries will be as follows:

DR: Provision for Doubtful debt

CR: Income statement (with actual amount decrease)

Illustration:

INCOME STATEMENT FOR THE YEAR ENDED……

Gross profit		xxxx
Add: income		
Provision for doubtful debts		xxxx
Less: expenses		
Bad debts	xxx	

Example

From previous example, At December 2015 debtor figure had fallen to TZS 10,500 and provision for doubtful debt still 2%

Show necessary entries

PROVISION FOR DOUBTFUL DEBT ON STATEMENT OF FINANCIAL POSITION

On statement of financial position accumulated provision for doubtful debt is deducted from total figure of debtors at the end of accounting period. i.e. the value of debtors at the end of year less the value of provision for doubtful debt at the end on the same year.

Illustration

STATEMENT OF FINANCIAL POSITION FOR THE YEAR END …..

CURRENT ASSET	
Debtors	xxx
Less: Provision for doubtful debt	xxx

Example 1

A business starts on 1 January 2012 and its financial year end is 31 December annually. A table of the debtors, the bad debts written off and the estimated bad debts at the rate of 2% of debtors at the end of each year is now given

Year to 31st Dec	Bad debts written-off during year	Debtors at end of year
2012	423	6,423
2013	510	7,510
2014	604	8,354
2015	610	7,110

Require: from above table open

a) Bad debts account
b) Provision for doubtful debt
c) Income statement at the end of each year
d) Statement of financial position at the end of each year

BAD DEBTS RECOVERY

Sometimes, a debt written off in previous years is recovered. When this happens, you:

1 Reinstate the debt by making the following entries:

DR: Debtor's account
CR: Bad debts recovered account

2 When payment is received from the debtor in settlement of all or part of the debt:

DR: Cash/bank
CR: Debtor's account

with the amount received

At the end of the financial year, the credit balance in the bad debts recovered account is transferred to either the bad debts account or direct to the income side of income statement

Further examples

1. In a new business during the year ended 31 December 2017 the following debts are found to be bad, and are written off on the dates shown:

31 May	S Gill & Son	TZS 340

30 September	H Black Ltd	TZS 463
30 November	A Thom	TZS 156

On 31 December 2018 the schedule of remaining debtors, amounting in total to TZS 14,420, is examined, and it is decided to make a provision for doubtful debts of TZS 410.

You are required to show:

a. The Bad Debts Account and the Provision for Doubtful Debts Account.
b. The charge to the Income statement.
c. The relevant extracts from the Statement of financial position as at 31 December 2017

2. A business had always made a provision for doubtful debts at the rate of 4% of debtors. On 1 January 2018 the provision for this, brought forward from the previous year, was TZS 320.

   During the year to 31 December 2018 the bad debts written off amounted to TZS 680.

   On 31 December 2018 the remaining debtors totaled TZS 16,800 and the usual provision for doubtful debts is to be made.

   You are to show:

   (*a*) The Bad Debts Account for the year ended 31 December 2018.

   (*b*) The Provision for Doubtful Debts Account for the year.

   (*c*) Extract from the Income statement for the year.

   (*d*) The relevant extract from the Statement of financial position as at 31 December 2018.

3. A business started trading on 1 January 2017. During the two years ended 31 December 2017 and 2018 the following debts were written off to the Bad Debts Account on the dates stated:

31 May 2017	F Lamb	TZS 175
31 October 2017	A Clover	TZS 230
31 January 2018	D Ray	TZS 190
30 June 2018	P Clark	TZS 75
31 October 2018	J Will	TZS 339

On 31 December 2017 there had been a total of debtors remaining of TZS 52,400. It was decided to make a provision for doubtful debts of TZS 640.

On 31 December 2018 there had been a total of debtors remaining of TZS 58,600. It was decided to make a provision for doubtful debts of TZS 710.

You are required to show:

i. The Bad Debts Account and the Provision for Doubtful Debts Account for each of the two years.
ii. The relevant extracts from the Statement of financial positions as at 31 December 2017 and 2018.

4. A business, which started trading on 1 January 2017, adjusted its doubtful debt provision

at the end of each year on a percentage basis, but each year the percentage rate is adjusted in accordance with the current 'economic climate'. The following details are available for the three years ended 31 December 2017, 2018 and 2019.

	Bad debts written off year to 31 December	*Debtors at 31 December*	*Percentage provision for doubtful debts*
	TZS	TZS	
2017	1,240	41,000	4
2018	2,608	76,000	6
2019	5,424	88,000	5

You are required to show:

a) Bad Debts Accounts for each of the three years.
b) Provision for Doubtful Debts Accounts for each of the three years.
a. Statement of financial position extracts as at 31 December 2017, 2018 and 2019.

5. A business which prepares its financial statements annually to 31 December suffered bad debts:

2017 TZS 420
2018 TZS 310
2019 TZS 580

The business had a balance of TZS 400 on the provision for doubtful debts account on 1 January 2017.

At the end of each year, the business considered which of its debtors appeared doubtful and carried forward a provision:

2017 TZS 500
2018 TZS 600
2019 TZS 400

Show the entries in the income statement and prepare the provision for doubtful debts account for each of the three years.

PROVISIONS FOR CASH DISCOUNTS ON DEBTORS (PCD)

This is amount set aside for cash discounts to be allowed on the debts outstanding after deduct provision for doubtful debt. Some businesses create provisions for cash discounts to be allowed on the debtors outstanding if they pay within a given time.

PCD = Net Debtors x % of cash discount

NOTE:

- The procedure for dealing with this is similar to the provision for doubtful debts.
- The discount allowed should be based on the NET figure of DEBTORS i.e. (Debtors – Bad debts – PBD)

Thus:

PCD = (Debtors – Bad debts - Provision for doubtful debts) x % of cash discount

Example:
Given the following detail from P.K ltd company:

Year ended 31 December	*Debtors*	*Bad debts*	*Provision for doubtful debts*	*Provision for cash discounts allowed*
	TZS	TZS	TZS	%
2013	4,100	100	200	2
2014	5,200	200	350	2
2015	5,000	250	250	2

From above date prepare:

i. Provision for doubtful debts
ii. Provision for cash discount allowed on debt
iii. Income Statement for each year (extract)
iv. Statement of financial position for each year (extract)

NB:

- When Terminology "BY" Used to indicate increase or decrease on provisions the actual amount stated will transfer to income statement.
- When Terminology "TO" Used to indicate increase or decrease on provisions the amount transefer to income statement will be a difference between current amount and previous amount.

Examples

Given the amount of debtors on 31st Dec 2011 was TZS 10,000 after deduct bad debts, and provision for doubtful debt was 5% on debt.

On 31st Dec 2012 provision for doubtful debt increase by TZS 100

On 31st Dec 2013 provision for doubtful debt decrease to TZS 400

On 31st Dec 2014 provision for doubtful debt increase to TZS 700

On 31st Dec 2015 provision for doubtful debt decrease by TZS 300

Open provision for doubtful debt account.

Assignment

The balance sheet as at 31 May 2017 of Moon Traders Limited included provision doubtful debts of TZS 2,300. The company's accounts for the year ended 31 May 2018 are now being prepared. The company's policy now is to relate the provision for doubtful debts to the age of debts outstanding. The debts outstanding at 31 May 2018 and the required provisions for doubtful debts are as follows:

Debts outstanding	*Amount*	*Provision for doubtful debts*
	TZS	%
Up to 1 month	24,000	1
More than 1 month and up to 2 months	10,000	2
More than 2 months and up to 3 months	8,000	4
More than 3 months	3,000	5

Customers are allowed a cash discount of $2^{1}/2$% for settlement of debts within one month. It is now proposed to make a provision for discounts to be allowed in the company's accounts for the year ended 31 May 2018.

Required:
Prepare the following accounts for the year ended 31 May 2018 in the books of Moon Traders Limited to record the above transactions:

a) Provision for doubtful debts;
b) Provision for discounts to be allowed on debtors.