

QB365 Question Bank Software Study Materials

Depreciation Accounting Important 2, 3 & 5 Marks Questions With Answers (Book Back and Creative)

11th Standard

Accountancy

Total Marks : 75

2 Marks

10 x 2 = 20

- 1) List out the various methods of depreciation.

Answer : The following are the different methods of providing depreciation:

- (i) Straight line method or Fixed instalment method or Original cost method
- (ii) Written down value method or Diminishing balance method
- (iii) Sum of years of digits method
- (iv) Machine hour rate method
- (v) Depletion method
- (vi) Annuity method
- (vii) Revaluation method
- (viii) Sinking fund method
- (ix) Insurance policy method

- 2) What is annuity method?

Answer : (i) Under this method, the amount spent on the purchase of an asset is regarded as an investment. As such, the interest at a certain rate is calculated on the opening balance of the asset account each year and debited to the asset account.
 (ii) The amount of depreciation written off is ascertained by- referring to the annuity table. Annual depreciation is uniform throughout the working life of the asset.

- 3) A firm purchased a plant for Rs. 40,000. Erection charges amounted to Rs. 2,000. Effective life of the plant is 5 years. Calculate the amount of depreciation per year under straight line method

Answer : Purchase price of plant = 4000

Erection charges = 2,000

Original cost = Purchase price + Installation charges

(i.e 40,000) + 2,000 = 42000

Effective life of the plant = 5 years

Estimated scrap value = Nil

$$\begin{aligned} \text{Amount of Depreciation} &= \frac{\text{Original cost} - \text{Estimated scrap value}}{\text{Estimated useful life of the asset in years}} \\ &= \frac{42000 - 0}{5 \text{ years}} \\ &= \text{Rs. } 8,400 \end{aligned}$$

- 4) A company purchased a building for Rs. 50,000. The useful life of the building is 10 years and the residual value is Rs. 2,000. Find out the amount and rate of depreciation under straight line method.

Answer : Amount of Depreciation = $\frac{\text{Total cost} - \text{scrap value}}{\text{Estimated life}}$

$$= \frac{50,000 - 2,000}{10} = \frac{48,000}{10}$$

= Rs. 4,800

Rate of Depreciation = $\frac{\text{Amount of Depreciation}}{\text{Original Cost}} \times 100$

$$= \frac{4,800}{50,000} \times 100 = 9.6\%$$

Amount of depreciation: Rs. 4,800; Rate of depreciation 9.6%

- 5) A boiler was purchased on 1st January 2015 from abroad for Rs. 10,000. Shipping and forwarding charges amounted to Rs. 2,000. Import duty Rs 7,000 and expenses of installation amounted to Rs. 1,000. Calculate depreciation for the first 3 years @ 10% p.a. on diminishing balance method assuming that the accounts are closed 31st December each year.

Answer :

DATE	PARTICULARS	AMOUNT
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		RS.
01.01.2015	Cost Price (10,000 + 2,000 + 7,000 + 1,000)	20,000
31.12.2015	Less: Depreciation (20,000 x $\frac{10}{100}$)	2,000
		18,000
31.12.2016	Less : Depreciation (18,000 x $\frac{10}{100}$)	1,800
		16,200
31.12.2017	Less : Depreciation (16,200 x $\frac{10}{100}$)	1,620
	Book Value of the Asset	14,580

Calculation of Profit or Loss on sale of Plant

∴ Amount of Depreciation: 2015 = Rs.2,000

2016 = Rs.1,800

2017 = Rs. 1,620

- 6) A firm acquired a machine on 1st April 2015 at a cost of Rs. 50,000. Its life is 6 years. The firm writes off depreciation @ 30% p.a. on the diminishing balance method. The firm closes its books on 31st December every year. Show the machinery account and depreciation account for three years starting from 1st April 2015.

Answer :

DATE	PARTICULARS	AMOUNT RS.	DATE	PARTICULARS	AMOUNT RS.
1.4.2015	To Bank A/c	50,000	31.12.2015	By Depreciation A/c (50,000 x $\frac{30}{100} \times \frac{9}{12}$)	11,250
			31.12.2015	By Balance c/d	38,750
		50,000			50,000
1.1.2016	To Balance b/d	38,750	31.12.2016	By Depreciation A/c (38,750 x $\frac{30}{100}$)	11,625
			31.12.2016	By Balance c/d	27,125
		38,750			38,750
1.1.2017	To Balance b/d	27,125	31.12.2017	By Depreciation A/c	8,138
			31.12.2017	By Balance c/d.	18,987
		27,125			27,125
1.1.2018	To Balance b/d	18,987			

Ledger Account

Dr. Machinery Account
Cr.

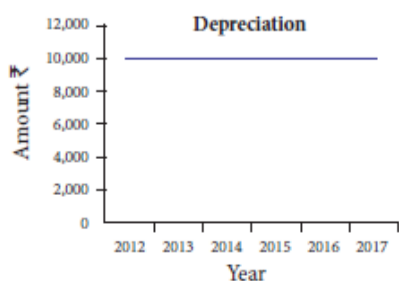
DATE	PARTICULARS	AMOUNT RS.	DATE	PARTICULARS	AMOUNT RS.
31.12.2015	To Machinery A/c	11,250	31.12.2015	By Profit and loss A/c	11,250
		11,250			11,250
31.12.2016	To Machinery A/c	11,625	31.12.2016	By Profit and loss A/c	11,625
		11,625			11,625
31.12.2017	To Machinery A/c	8,138	31.12.2017	By Profit and loss A/c	8,138
		8,138			8,138

Dr. Depreciation Account
Cr.

- 7) On 1.1.2017 a firm purchased a machine at a cost of Rs.1,00,000. Its life was estimated to be 10 years with a scrap value of Rs.10,000. Compute the amount of depreciation to be charged at the end of each year.

Answer : Amount of depreciation per year = $\frac{\text{Original cost of the asset} - \text{Estimated scrap value}}{\text{Estimated useful life of the asset in years}}$
 $= \frac{1,00,000 - 10,000}{10} = \frac{90,000}{10} = \text{Rs. } 9,000 \text{ per year}$

When it is plotted on a graph for 5 years, it appears as follows:



- 8) From the following information, calculate the amount of depreciation and rate of depreciation under straight line method.
 Purchase price of machine ` 80,000
 Expenses to be capitalised ` 20,000
 Estimated residual value ` 35,000
 Expected useful life 5 years

Answer :

- 9) A company has purchased a machinery for Rs.1,80,000 and spent Rs.10,000 for its installation. The estimated life of the machinery is 5 years with a residual value of Rs.15,000. Find out the amount of depreciation to be provided every year.

Answer : Amount of depreciation per year = $\frac{\text{Original cost of the asset} - \text{Estimated scrap value}}{\text{Estimated useful life of the asset in years}}$
 $= \frac{1,90,000 - 15,000}{5} = \frac{1,75,000}{5} = \text{Rs.}35,000 \text{ per year}$

- 10) Depreciation is a non-cash expense which should not be provided for in the profit and loss account comment.

Answer : It is not comment to say that depreciation being a non-cash expense should not be allowed for in the books. If depreciation is not provided for, it will result in overstatement of assets and profits. It is also not in agreement with the matching principle which says that expenses for a period should be matched with the revenues.

3 Marks

10 x 3 = 30

- 11) What are the objectives of providing depreciation?

Answer : Following are the objectives of providing depreciation:

(i) To find out, the true profit or loss:

- (a) When all asset is used for generating income for a business, the reduction in the value of the asset proportionate to the benefit derived from it, should be charged against the revenue.
 (b) This is to be done to find out the true profit or loss of the business for every accounting period.

(ii) To present the true and fair view of financial position:

- (a) When the depreciation is charged on fixed assets, the book value of fixed assets are reduced to that extent and the remaining value is shown in the balance sheet.
 (b) The balance represents the value of benefit that is yet to be derived from them.

(iii) To facilitate replacement of fixed assets:

- (a) Depreciation is a non-cash item. That is why, when the depreciation is debited to profit and loss account, an equal amount is retained in the business.
 (b) When the life of an asset comes to an end, a new asset can be purchased by using the resources available in the business.

(iv) To Comply with legal requirements :

Depreciation is provided on fixed assets to comply with the provisions, of law.

- 12) Calculate the rate of depreciation under straight line method from the following information

Purchased a second hand machinery on 1.1.2018 for Rs. 38,000
 On 1.1.2018 spent Rs. 12,000 on its repairs
 Expected useful life of machine is 4 years
 Estimated residual value Rs. 6,000

Answer : Amount of depreciation = $\frac{(\text{Price of the Asset} + \text{Installation charges}) - \text{Scrapvalue}}{\text{Estimated life of the Asset}}$

$= \frac{(38,000 + 12,000) - 6,000}{4}$

$= \frac{44,000}{4} = \text{Rs.}11,000$

Rate of Depreciation = $\frac{\text{Amount of depreciation}}{\text{Original Cost}} \times 100$

$= \frac{11,000}{50,000} \times 100 = 22\%$

Amount of depreciation Rs. 11,000; Rate of depreciation 22%)

- 13) A firm purchased a plant on 1.1.2018 for Rs.9,000 and spent Rs.1,000 as erection charges. Calculate the amount of depreciation for the year 2018 @ 15% per annum under the written down value method. Accounts are closed on 31st March every year.

Answer : Original cost = 9,000 + 1,000 = 10,000

Rate of depreciation = 15%

Date of purchase = 1.1.2018

Number of months used = 1.1.2018 to 31.03.2018 = 3 months

Amount of depreciation = 15% on 10,000 for 3 months

= 10,000 × 15% × 3/12 = Rs.375

- 14) Joy and Co. purchased machinery on 1st April 2016 for Rs.75,000. On 31st March 2018, it sold the machinery for Rs.62,000. Depreciation is to be provided every year at 10% per annum on the fixed instalment method. Accounts are closed on 31st March every year. Find out the profit or loss on sale of machinery.

Answer : Calculation of profit or loss on sale of machinery

PARTICULARS	RS
Cost price	75,000
Less: Depreciation for 2016-17 (75,000 × 10%)	7,500
	67,500
Less: Depreciation for 2017-18 (75,000 × 10%)	7,500
Book value on the date of sale	60,000
Less: Selling price	62,000
Profit on sale	- 2,000

The selling price is more than the book value on the date of sale of machinery. Hence, the difference Rs.2,000 is profit on sale of machinery.

- 15) From the following information, calculate the amount of depreciation and rate of depreciation under straight line method.
Purchase price of machine Rs. 80,000
Expenses to be capitalised Rs. 20,000
Estimated residual value Rs. 35,000
Expected useful life 5 years.

Answer : Amount of depreciation per year = $\frac{\text{Original cost of the asset} - \text{Estimated scrap value}}{\text{Estimated useful life of the asset in years}}$

$$= \frac{1,00,000 - 35,000}{5} = \frac{65,000}{5} = \text{Rs. 13,000 per year}$$

$$\text{Rate of depreciation} = \frac{\text{Amount of depreciation per year}}{\text{Original cost}} \times 100$$

$$= \frac{13,000}{1,00,000} \times 100 = 13\%$$

Note:

Original cost = Purchase price + Expenses to be capitalised

$$= 80,000 + 20,000 = \text{Rs. 1,00,000}$$

- 16) Furniture was purchased for Rs.1,00,000 on 1.7.2016. It is expected to last for 5 years. Estimated scrap at the end of five years is Rs.10,000. Find out the rate of depreciation under straight line method.

Answer : Original cost = Rs. 1,00,000

Scrap value = Rs. 10,000

Estimated life = 5 years

$$\text{Amount of depreciation} = \frac{\text{Original cost} - \text{Scrap value}}{\text{Estimated life}}$$

$$= \frac{1,00,000 - 10,000}{5 \text{ years}}$$

$$= \frac{90,000}{5}$$

$$= \text{Rs.18,000}$$

$$\text{Rate of depreciation} = \frac{\text{Amount of depreciation}}{\text{Original cost}} \times 100$$

$$= \frac{18,000}{1,00,000} \times 100$$

$$= 18\%$$

Amount of depreciation Rs. 18,000; Rate of depreciation 18%)

- 17) An asset is purchased on 1.1.2016 for Rs.50,000. Depreciation is to be provided annually according to straight line method. The useful life of the asset is 10 years and its residual value is Rs. 10,000. Accounts are closed on 31st December every year. You are required to find out the rate of depreciation and give journal entries for first two years.

Answer : Original cost = Rs. 50,000

Residual value = Rs. 10,000

Estimated life = 10 years

$$\begin{aligned}\text{Amount of depreciation} &= \frac{\text{Original cost} - \text{Scrap value}}{\text{Estimated life}} \\ &= \frac{50,000 - 10,000}{10} \\ &= \frac{40,000}{10} \\ &= \text{Rs. 4,000}\end{aligned}$$

$$\begin{aligned}\text{Rate of depreciation} &= \frac{\text{Amount of depreciation}}{\text{Original cost}} \times 100 \\ &= \frac{4,000}{50,000} \times 100 \\ &= 8\%\end{aligned}$$

Amount of depreciation Rs 4,000, Rate of depreciation 8%)

DATE	PARTICULARS	DEBIT (RS.)	CREDIT (RS.)
1.1.2016	Machinery A/c Dr. To Bank A/c (Machinery bought)	50,000	50,000
31.12.2016	Depreciation A/c Dr. To Machinery A/c (Depreciation provided)	4000	4000
31.12.2016	Profit and loss A/c Dr. To Depreciation A/c (Depreciation transferred to profit and loss A/c)	4000	4000
31.12.2017	Profit and loss A/c Dr. To Depreciation A/c (Depreciation transferred to profit and loss A/c)	4000	4000

Journal entry

18) Write a short note on - Insurance Policy Method

- Answer :** (i) Under this method, an insurance policy is taken for an amount equal to the cost of replacement of the asset.
(ii) The amount of depreciation is paid by way of insurance premium every year to the insurance company.
(iii) On maturity of the policy, the policy amount is received from the insurance company and it is used for the purchase of new asset.

19) Bring out the characteristics of depreciation.

Answer : Following are the characteristics of depreciation:

- Depreciation is the process of allocation of cost of depreciable asset (capital expenditure) to revenue expenditure or to profit and loss account over the useful life of the asset.
- It is the process of allocation of cost and not the process of valuation.
- It is a decrease in the book value of the asset and not the market value of the asset.
- It is a gradual and continuous decrease in the book value of asset over its useful life.
- It is calculated only for tangible depreciable fixed assets. Depreciation is not provided on intangible and wasting assets

20) Explain the written down value method of depreciation and give its formula.

Answer : Under this method, depreciation is charged at a fixed percentage on the written down value of the asset every year. Hence, it is called written down value method. Written down value is the book value of the asset, i.e., original cost of the asset minus depreciation upto the previous accounting period. As the amount of depreciation goes on decreasing year after year, it is called diminishing balance method or reducing installment method.

The following formula is used to compute the rate of depreciation under written down value method:

Example: Original cost ₹ 1,00,000; Scrap value ₹ 1,000; Useful life 5 years

$$= (1 - 0.3981) \times 100$$

$$= 0.6019 \times 100 = 60.19\%$$

Rate of depreciation : 60.190

If the scrap value is 10,000; rate of depreciation is 3.6.90%

If there is no scrap value, rate of depreciation will be 100%.

Hence, to calculate depreciation the scrap value is taken as 1.

If the scrap value is less, rate of depreciation will be high.

5 Marks

5 x 5 = 25

- 21) From the following particulars, give journal entries for 2 years and prepare machinery account under straight line method of providing depreciation:
- Machinery was purchased on 1.1.2016
 - Price of the machine Rs. 36,000
 - Freight charges Rs. 2,500
 - Installation charges Rs. 1,500
 - Life of the machine 5 years

Answer : Amount of depreciation per year = $\frac{\text{Original cost}}{\text{Estimates useful life}}$
 $= \frac{40,000}{5} = \text{Rs.}8,000$

Rate of Depreciation per year = $\frac{\text{Amount of depreciation}}{\text{Original Cost}} \times 100$
 $= \frac{8,000}{40,000} \times 100 = 20\%$

(Note : Cost of the asset = Purchase price +Transportation cost + Installation cost,
 $= 36,000 + 2,500 + 1,500 = \text{Rs.}40,000$)

Amount of depreciation: Rs. 8,000; Balance in machinery A/c: Rs. 24,000)

DATE	PARTICULARS	L.F	DEBIT RS.	CREDIT RS.
2016 January 1	Machinery A/c To Bank A/c (Machinery bought)	Dr	36,000	36,000
January 1	Machinery A/c To Bank A/c (Transportation and installation cost incurred on purchase of machinery)	Dr	4,000	4,000
December 31	Depreciation A/c To Machinery a/C (Depreciation provided)	Dr	8,000	8,000
December 31	Profit and loss A/c To Depreciation A/c (Depreciation transferred to profit and loss amount)	Dr	8,000	8,000
2017 December 31	Depreciation A/c To-Machinery A/c (Depreciation provided)	Dr	8,000	8,000
December 31	Profit and loss A/c To Depreciation A/c (Depreciation transferred to profit and loss account)	Dr	8,000	8,000

Journal entries

DATE	PARTICULARS	AMOUNT RS.	DATE	PARTICULARS	AMOUNT RS.
2016 Jan 1	To Bank A/c	36,000	2016 Dec 31	By Depreciation A/c	8,000
Jan I	To Bank A/c	4,000	Dec 31	By Balance c/d	32,000
		40,000			40,000
2017	To Balance	32,000	2017	By Depreciation	8,000

Jan 1	b/d		Dec 31	A/c	
			Dec 31	By Balance c/d	24,000
		32,000			32,000
2018	To Balance	24,000			
Jan 1	b/d				
Dr	Ledger Account Machinery Account			Cr	

- 22) On 1st October 2014, a truck was purchased for Rs. 8,00,000 by Laxmi Transports Ltd. Depreciation was provided @ 15% p.a. under diminishing balance method. On 31st March 2017, the above truck was sold for Rs. 5,00,000. Accounts are closed on 31st March every year. Find out the profit or loss made on the sale of the truck.

Answer :

PARTICULARS	AMOUNT RS.
Cost of the Truck(1.10.2014)	8,00,000
Less: 1 st year Depreciation 2015 (8,00,000 × $\frac{15}{100}$ × $\frac{6}{12}$)	60,000
	7,40,000
Less: II nd year Depreciation 2016 (7,40,000 × $\frac{15}{100}$)	1,11,000
	6,29,000
Less: III rd year Depreciation 2017 (6,29,000 × $\frac{15}{100}$)	94,350
Book Value of the Truck	5,34,650
Selling price	5,00,000
Loss on sale of Truck	34,650

Calculation of Profit or loss on sale of truck

- 23) Ramu Brothers purchased a machine on 1st July 2016 at a cost of Rs.14,000 and spent Rs.1,000 on its installation. The firm writes off depreciation at 10% of original cost every year. The books are closed on 31st December every year. Give journal entries and prepare machinery account and depreciation account for 2 years

Answer : Cost of the asset = Purchase price + Installation cost

= 14,000 + 1,000 = Rs.15,000

Journal entries

DATE	PARTICULARS		DEBIT	CREDIT
2016	Machinery A/c	Dr	14,000	
July 1	To Bank A/c (Machinery bought)			14,000
July 1	Machinery A/c	Dr	1,000	
	To Bank A/c (Installation expenses on machinery incurred)			1,000
December 31	Depreciation A/c	Dr	750	
	To Machinery A/c (15,000 × 10/100 × 6/12) (Depreciation provided)			750
December 31	Profit and Loss A/c Dr.	Dr	750	
	To Depreciation A/c (Depreciation transferred to profit and loss account)			750
2017 December 31	Depreciation A/c (15,000 × 10/100)	Dr	1,500	
	To Depreciation A/c (Depreciation transferred to profit and loss account)			1,500
December 31	Profit and Loss A/c	Dr	1,500	
	To Depreciation A/c (Depreciation transferred to profit and loss account)			1,500

Ledgers

DATE	PARTICULARS	RS	DATE	PARTICULARS	RS
2016			2016		
July 1	To Cash A/c	15,000	Dec 31	By Depreciation A/c	750
				By Balance c/d	14,250
		15,000			15,000
2017	To Balance b/d	14,250	2017		
Jan 1			Dec 31	By Depreciation A/c	1,500
				By Balance c/d	12,750
		14,250			14,250
2018					
Jan 1	To Balance b/d	12,750			

Dr Machinery Account

Cr

DATE	PARTICULARS	RS	DATE	PARTICULARS	RS
2016			2016		
Dec 31	To Machinery A/c	750	Dec 31	By Profit and Loss A/c	750
		750			750
2017			2017		
Dec	To Machinery	1,500	Dec	By Profit and	1,500

31	A/c	1,500	31	Loss A/c	1,500
Dr.					Cr
	Depreciation Account				

- 24) M/s Ramco textile mills purchased machinery on 1st April 2014 for Rs.2,00,000 on credit from M/s. Nila & Co. and spent Rs.10,000 on its installation. Depreciation is provided at 10% per annum on the written down value method. Prepare machinery account and depreciation account for the first three years. Books are closed on 31st March every year.

Answer :

DATE	PARTICULARS		DATE	PARTICULARS	
2014 April 1	To Nila & Co. A/c	2,00,000	2015 March 31	By Depreciation A/c	21,000
April 1	To Bank A/c	10,000		(2,10,000 ×10%)	
			March 31	By Balance c/d	1,89,000
		2,10,000			2,10,000
2015 April 1	To Balance b/d	1,89,000	2016 March 31	By Depreciation A/c	18,900
				(1,89,000 ×10%)	
			March 31	By Balance c/d	1,70,100
		1,89,000			1,89,000
2016 April 1	To Balance b/d	1,70,100	2017 March 31	By Depreciation A/c	17,010
				(1,70,100 ×10%)	
			March 31	By Balance c/d	1,53,090
		1,70,100			1,70,100
2017 April 1	To Balance b/d	1,53,090			

Machinery Account

DATE	PARTICULARS		DATE	PARTICULARS	
2015 March 31	To MachineryA/c	21,000	2015 March 31	By Profit & Loss A/c	21,000
		21,000			21,000
2016 March 31	To MachineryA/c	18,900	2016 March 31	By Profit & Loss A/c	18,900
		18,900			18,900
2017 March 31	To MachineryA/c	17,010	2017 March 31	By Profit & Loss A/c	17,010
		17,010			17,010

Depreciation Account

- 25) Michel & Co., purchased a Second hand Plant for Rs. 4,70,000 on 1st July 2001. They spent Rs. 30,000 on the repairs and installed the Plant. Depreciation is written off at 10% p.a. on the Straight line method. On 30th September 2003, the Plant was found to be unsuitable and sold for Rs. 3,50,000.
Prepare Plant account and Depreciation account for three years assuming that the accounts are closed on 31st March every year.

Answer :

DATE	PARTICULARS	AMOUNT
2001 July 01	Cost of the Plant	4,70,000
	Add : Repair Charges	30,000
		5,00,000
2002 Mar 31	Less : Depreciation [5,00,000 × $\frac{10}{100}$ × $\frac{9}{12}$]	37,500
		4,62,500
2003 Mar 31	Less : Depreciation [5,00,000 × $\frac{10}{100}$]	50,000
		4,12,500
2003 Sep 31	Less : Depreciation [5,00,000 × $\frac{10}{100}$ × $\frac{6}{12}$]	25,000
	Book Value	3,87,500
	Sales Vale	3,50,000
	Loss	37,500

Calculation of Profit or Loss on Sale of plant

DATE	PARTICULAR	AMOUNT RS	DATE	PARTICULAR	AMOUNT RS
2001 July 01	To Bank A/c	4,70,000	2002 Mar 31	By Depreciation A/c	37,500
"	To Bank A/c	30,000	"	By Balance c/d	4,62,500
		5,00,000			5,00,000
2002 Apr 01	To Balance b/d	4,62,500	2003 Mar 31	By Depreciation A/c	50,000
		4,62,500	"	By Balances c/d	4,12,500
		4,62,500			4,62,500
2003 Apr 01	To Balance b/d	4,12,500	2003 Sep 31	BY Depreciation A/c	25,000
		4,12,500	"	By Bank A/c	3,50,000
		4,12,500	"	By Profit & Loss A/c	37,500
		4,12,500			4,12,500

Plant Account

DATE	PARTICULAR	AMOUNT RS	DATE	PARTICULARS	AMOUNT RS
2002 Mar 31	To Plant A/c	37,500	2002 Mar 31	By Profit & loss A/c	37,500
		37,500			37,500
2003 Mar 31	To Plant A/c	50,000	2003 Mar 31	By Profit & loss A/c	50,000
		50,000			50,000
2004 Mar 31	To Plant A/c	25,000	2004 Mar 31	By Profit & loss A/c	25,000
		25,000			25,000

Depreciation Account

