

Accounting for Tangible Plant Assets

Qno1: On January 1, 2007, Adnan co acquired a machine having a list price of Rs.200,000 subject to a trade discount of 10%. The credit term were 2/10, n/30. Sales tax is payable @ 5% on net cash price. On January 9, 2007 company made the payment. Following are the expenditures incurred:

Foundation	Rs.1,780
Installation	1,500
Test run cost	1,000
Freight	5,000
2 years fire insurance	2,000
Insurance in transit	1,000
During installation certain part of the machine was damaged that was replaced at	500
Import duty	1,000
Certain part was replaced with an advanced one costing	3,000
During transit company driver paid fine due to not following traffic rules	500

Required:

- 1) Compute the cost of machine
- 2) Give entries to record
 - a) Purchase of machine.
 - b) Expenditures incurred.

Qno2: For all the situations given below compute the cost of machine and record the entries for purchase of the machine and expenditures incurred.

Situation no 1:

Salman Stores purchased equipment having a list price of Rs.100, 000 subject to a trade discount @ 10% on 1st January, 2007.

Situation no 2:

On January 1, 2007, Rizwan Stores purchased equipment having a list price of Rs.100, 000. The credit terms were 5/20, n/30. Store made the payment within discount period.

Situation no 3:

On January 1, 2007, Ali Company purchased equipment having a list price of Rs.50, 000 subject to a trade discount @ 10%. The credit terms were 3/10, n/45. Store availed the discount.

Situation no 4:

Babar Company acquired a machine having a list price of Rs.600, 000 on January 1, 2003. The machine is subject to a trade discount @5%. The credit terms were 2/15, n/30. Company made the payment on January 10, 2003.

Situation no 5:

On January 1, 2002, Ali Company purchased a machine having a list price of Rs.100, 000 subject to a trade discount of Rs.10, 000. The credit terms were 2/10, n/30. Sales tax is payable @ 5% on net cash price. The company availed the discount. Company paid freight charges Rs.4, 000 and installation Rs.5, 000. Insurance in transit was of Rs.3, 000.

Qno3: Sitara Enterprises bought a machine whose cost and scrap value are Rs.150,000 and 10,000 respectively. Estimated useful life of machine is following:

- Life in years=5

Company's accounting year ends on Dec 31 each year.

Required:

Compute depreciation expense for entire life under each of the following cases:

Case no 1: Machine is purchased on Jan 1, 2001 and straight line method is used to compute depreciation charge.

Case no 2: Machine is purchased on Mar 1, 2001 and straight line method is used to compute depreciation charge.

Case no 3: Machine is purchased on Jan 1, 2001 and Diminishing Balance method is used to compute depreciation charge.

Case no 4: Machine is purchased on Aug 12, 2001 and Diminishing Balance Method is used to compute depreciation charge.

Case no 5: Machine is purchased on Jan 1, 2001 and sum of the years' digits method is used to compute depreciation charge.

Case no 6: Machine is purchased on Mar 1, 2001 and sum of the years' digits method is used to compute depreciation charge.

Case no 7: Machine is purchased on Aug 1, 2001 and sum of the years' digits method is used to compute depreciation charge.

Case no 8: Machine is purchased on Dec 9, 2001 and sum of the years' digits method is used to compute depreciation charge.

Case no 9: Machine is purchased on Feb 5, 2001 and sum of the years' digits method is used to compute depreciation charge.

Qno4: Salman & company acquired a machine on January 1, 2007 having list price of Rs.300, 000 subject to the trade discount of 10%. The credit term is 2/10, n/30. The company made payment on 1 January. In addition to this, it paid transportation Rs.5, 560, installation Rs.1, 000 and foundation Rs.840. It incurred repair expenditures because a part of the machine got damaged and was replaced at the cost of Rs.1,000. Estimated useful life of machine is 5 years with the scrap value of Rs.2, 000. The company uses straight line method for depreciation charge and allowance method for recording it. The accounting year of company ends on December 31 each year.

Required:

- 1) Compute cost of machine.
- 2) Compute depreciable cost.
- 3) Compute (estimated) depreciation charge for the whole life of asset.
- 4) Prepare entries for acquisition of machine, expenditures incurred thereof and depreciation charge for whole life.
- 5) Prepare general ledger for machine, depreciation expense and accumulated depreciation.
- 6) Prepare partial balance sheet for 2007, 2011 and 2011.

Qno5: On January 1, 2007, Javed & Brothers purchased furniture whose depreciable cost is Rs.95, 000. Estimated useful life is 4 years and residual value Rs.10, 000. The company uses diminishing balance method for deprecation charge and allowance method for recording it. The accounting year of company ends on December 31 each year.

Required:

- 1) Compute net cost of machine.
- 2) Compute depreciation charge for whole life of machine.
- 3) Prepare entries for purchase of machine and depreciation charge for whole life of asset.
- 4) Prepare general ledger.
- 5) Prepare partial balance sheet for Dec 31 , 2009.

Qno6: “Noor Silk Mills” purchased a machinery at a list price of Rs.55,000 with a 2% discount if payment is made within 15 days. The discount was availed by the company. Freight charges amounted to Rs.3,250. The company also paid a fine of Rs.200 on the negligent driving of the company's own driver who was engaged in transporting the machinery. The labor cost to install the machinery was Rs.2,000. During installation work , the machinery was damaged and repairs cost Rs.450. After the machinery had been in use for three months, it was cleaned and lubricated at a cost of Rs.500.

Required:

1. Journalize the above transaction and calculate the total cost at which the machinery should appear in the books of the company.
2. Assume an estimated life of 10 years for this machinery with salvage value of Rs.4,140. Calculate depreciation for the first 5 years on acceleration principle by SYD method , showing clearly depreciation , accumulated depreciation and written down value of the asset.

Qno7: The Luqman Company purchased a truck on January 1 , 1993. The dealer's list price was Rs.400,000 and he allowed 2% discount for cash

purchase. The company then paid Rs.1,500 to a metal shop for welding special racks to the body of the truck and paid Rs.2,000 for a truck license and Rs.6,000 for a two-year liability insurance policy. The truck has an estimated life of 5 years and an estimated salvage value of Rs.40,000.

Required:

1. Record the payments for the truck , the special racks , the license and the insurance.
2. Compute the depreciation which will be recorded on December 31 of each year of the truck's life if the company uses straight line method.

Qno8: M/s Nawab Shah Trading Co had the following assets on Jan 1 , 2010. Necessary information relating to these assets is given as under:

Name of Asset	Date of Acquisition	Cost	Useful Life	Scrap Value	Method of Depreciation
Store Equipment	Jan 1 , 2009	Rs.55,000	10 Years	Rs.5,000	Straight Line
Machine-A	July 1 , 2009	Rs.45,000	4 Years	Rs.4,000	SYD Method
Factory Machine	Jan 1 , 2010	Rs.60,000	10 Years	Rs.3,000	SYD Method
Machine-B	July 1 , 2010	Rs.50,000	20 Years	Rs.5,000	Fixed % on declining Balance Method

Required:

Compute the amount of accumulated depreciation for above assets at Dec 31 , 2010.

Qno9: (Depreciation—Conceptual Understanding) Hasselback Company acquired a plant asset at the beginning of Year 1. The asset has an estimated service life of 5 years. An employee has prepared depreciation schedules for this asset using three different methods to compare the results of using one method with the results of using other methods. You are to assume that the following schedules have been correctly prepared for this asset using (1) the straight-line method, (2) the sum-of-the-years'-digits method, and (3) the double-declining-balance method.

Year	Straight-Line	Sum-of-the-Years'-Digits	Double-Declining-Balance
1	\$ 9,000	\$15,000	\$20,000
2	9,000	12,000	12,000
3	9,000	9,000	7,200
4	9,000	6,000	4,320
5	9,000	3,000	1,480
Total	<u>\$45,000</u>	<u>\$45,000</u>	<u>\$45,000</u>

Instructions:

Answer the following questions.

- (a) What is the cost of the asset being depreciated?
- (b) What amount, if any, was used in the depreciation calculations for the salvage value for this asset?
- (c) Which method will produce the highest charge to income in Year 1?
- (d) Which method will produce the highest charge to income in Year 4?
- (e) Which method will produce the highest book value for the asset at the end of Year 3?
- (f) If the asset is sold at the end of Year 3, which method would yield the highest gain (or lowest loss) on disposal of the asset?

Qno10: (Depreciation Computations—SYD, DDB—Partial Periods) Cosby Company purchased a new plant asset on April 1, 2010, at a cost of \$774,000. It was estimated to have a service life of 20 years and a salvage value of \$60,000. Cosby's accounting period is the calendar year.

Instructions:

- (a) Compute the depreciation for this asset for 2010 and 2011 using the sum-of-the-years'-digits method.
- (b) Compute the depreciation for this asset for 2010 and 2011 using the double-declining-balance method.

Qno11: (Depreciation Computations, SYD) Pippen Company purchased a piece of equipment at the beginning of 2007. The equipment cost \$502,000. It has an estimated service life of 8 years and an expected salvage value of \$70,000. The sum-of-the-years'-digits method of depreciation is being used. Someone has already correctly prepared a depreciation schedule for this asset. This schedule shows that \$60,000 will be depreciated for a particular calendar year.

Instructions:

Show calculations to determine for what particular year the depreciation amount for this asset will be \$60,000.

Qno12: (Depreciation for Partial Period—SL, SYD, and DDB) Alladin Company purchased Machine #201 on May 1, 2010. The following information relating to Machine #201 was gathered at the end of May.

- Price = \$85,000
- Credit terms = 2/10, n/30
- Freight-in costs = \$ 800
- Preparation and installation costs = \$ 3,800
- Labor costs during regular production operations = \$10,500

It was expected that the machine could be used for 10 years, after which the salvage value would be zero.

Alladin intends to use the machine for only 8 years, however, after which it expects to be able to sell it for \$1,500. The invoice for Machine #201 was paid May 5, 2010. Alladin uses the calendar year as the basis for the preparation of financial statements.

Instructions:

(a) Compute the depreciation expense for the years indicated using the following methods. (Round to the nearest dollar.)

(1) Straight-line method for 2010.

(2) Sum-of-the-years'-digits method for 2011.

(3) Double-declining-balance method for 2010.

(b) Suppose Kate Crow, the president of Alladin, tells you that because the company is a new organization, she expects it will be several years before production and sales reach optimum levels. She asks you to recommend a depreciation method that will allocate less of the company's depreciation expense to the early years and more to later years of the assets' lives. What method would you recommend?

DISPOSAL

Qno1: Disposal-Sale: Chanda Enterprises purchased a machine on Jan 1, 2001 at a cost of Rs.250,000 with trade-in-value of Rs.20,000. The asset is estimated to be used for 10 years. Straight line method is used to compute depreciation and allowance method for recording it.

Required:

Compute loss or gain on sale under each of the following cases and record entries for disposal:

1. On Jan 1, 2007, the machine was sold for Rs.120,000.
2. On June 30, 2008, the machine was sold for Rs.70,000.
3. On Dec 28, 2005, the machine was sold for Rs.135,000.

Qno2: Huma Corporation purchased machinery on Jan 1, 2000 at an invoice price of Rs.40,000. Additional costs were incurred as follows:

Installation and testing Rs.1,200 ; freight Rs.600 ; Insurance-in-transit Rs.200 ; and a 3-year fire insurance policy Rs.600. It is estimated that the machinery will have a scrap value of Rs.200 at the end of its estimated service life of 10 years.

Required:

Record the disposal of the machine under each of the following conditions:

1. Straight line method → The machinery was used for 8 years and sold for Rs.3,000.
2. Sum of the years' digits → The machinery was used for 4 years and sold for Rs.20,000.
3. Diminishing balance method → The machinery was used for 5 years and sold for Rs.10,000.

Qno3: On January 1, 2000, the Modern Typing Center purchased three typewriters for Rs.10,500 each cash and charged Equipment Account with total cost. On Oct 27, 2002, two typewriters were purchased for Rs.11,600 each cash. On Mar 27, 2004, two typewriters purchased on Jan 1, 2000 were sold for Rs.950 each. On April 3, 2005 four new typewriters were purchased for 9,000 each cash. On Sep 28, 2006, one typewriter purchased on Oct 27, 2004 was sold for 1,500 cash.

The company charges depreciation at 20% of cost and closes its books annually on Dec 31.

Required:

Give dated journal entries in skeleton form for recording necessary information of the period Jan 1, 2000 to Dec 31, 2006 (Show necessary computations).

Present Equipment account and Allowance for Depreciation account on the balance sheet of Dec 31, 2005.

Qno4: Disposal-Exchange: Zindagi Enterprises purchased a machine on Jan 1, 2001 at a cost of Rs.150,000 with trade-in-value of Rs.20,000. The asset is estimated to be used for 10 years. Straight line method is used to compute depreciation and allowance method for recording it.

Required:

Compute loss or gain on sale under each of the following cases and record entries for disposal:

1. On Jan 1, 2007, the machine was exchanged with a new machine having a cost of Rs.200,000. Whereas trade-in-allowance of existing machine was estimated to be Rs.80,000.
2. On June 30, 2008, the machine was traded-in with a new machine whose cost was Rs.180,000. Trade-in-allowance for existing machine was Rs.40,000.
3. On Dec 28, 2005, the machine was exchanged with a new machine with a cost of Rs.300,000. Trade-in-allowance for existing machine was estimated to be Rs.85,000.

Change in Estimate

Qno1: (Depreciation—Change in Estimate) Machinery purchased for \$52,000 by Carver Co. in 2006 was originally estimated to have a life of 8 years with a salvage value of \$4,000 at the end of that time. Depreciation has been entered for 5 years on this basis. In 2011, it is determined that the total estimated life should be 10 years with a salvage value of \$4,500 at the end of that time. Assume straight-line depreciation.

Instructions:

(a) Prepare the entry to record depreciation for 2011.

Qno2:The Baba Company purchased a building on January 1 , 1999 for Rs.70,000.The building was estimated to have a life of 35 years at that time and no salvage value.Depreciation is recorded at the end of the company's fiscal year each on Dec 31.

On January 1 , 2005 , total life of the building was estimated to be 50 years instead of the original 35 years.

Required:

Record the entry for depreciation for the year 2004 and for the year 2005.

Qno3:The Karachi Tool Manufacturing Company purchased a machine on July 1 , 1999 for Rs.51,000.It was estimated to have a life of 12 years with a Rs.3,000 trade-in-value .During 2004 , it was apparent that the machinery would be useless after 2006 and it would have ne trade-in or salvage value.The chief accountant was instructed to make the necessary correction when making the annual adjustments.The company closed its books on Dec 31 of each year.

Required:

Journal entries from July 1 , 1999 to Dec 31 , 2006.

Qno4: Bashir & Co purchased a machine on Jan 1 , 1990 at a cost of Rs.79600.Useful life was estimated to be 10 years and scrap value of Rs.3,600.Bashir Co depreciates its machine on straight line method and closes its books on December 31.

In December 1993 , the company decided that the estimated total life should be revised from 10 years to 6 years and scrap value should be lowered from Rs.3,600 to Rs.2,400.This revision was made prior to recording depreciation for the financial year ended Dec 31 , 1993.

On June 30 , 1994 , the machine was sold for Rs.20,000.

Required:

Prepare Journal entries for all the above transactions and the depreciation expense from Jan 1 , 1990 to June 30 , 1994.

Qno5:M/s Pak Engineering Co purchased and put into use different machines on Jan 1 , 1988.Necessary information relating to these machines is summarized below:

Description	Machine A	Machine B	Machine C	Machine D
Cost	Rs.40,000	Rs.50,000	Rs.50,000	Rs.50,000
Estimated Scrap Value	Rs.5,000	Rs.5,000	Nil	Nil
Method of Depreciation	Straight line method	Straight line method	Declining Balance Method	Declining Balance Method
Estimated life	5 years	4 years	-	-
Fixed Rate of Depreciation	-	-	30%	40%

On January 1 , 1991 , the useful life of machine A was revised from 5 years to 7 years. Machine D was exchanged for a similar machine on July 1 , 1991.The new machine was priced at Rs.60,000 and seller accepted the used machine for Rs.7,760 and the balance was paid in cash.

Machine C is considered useless on Oct 1 , 1992 and sold as scrap for Rs.2,304 cash.

Required:

1. Show the balance in each of the four machine account as on Jan 1 , 1991.
2. Give the necessary journal and adjusting entries for 1991 and 1992.The company follows the calendar year as its accounting year.

Qno6: (Depreciation Computation—Addition, Change in Estimate) In 1983, Abraham Company completed the construction of a building at a cost of \$1,900,000 and first occupied it in January 1984. It was estimated that the building will have a useful life of 40 years and a salvage value of \$60,000 at the end of that time.

Early in 1994, an addition to the building was constructed at a cost of \$470,000. At that time it was estimated that the remaining life of the building would be, as originally estimated, an additional 30 years, and that the addition would have a life of 30 years, and a salvage value of \$20,000.

In 2012, it is determined that the probable life of the building and addition will extend to the end of 2043 or 20 years beyond the original estimate.

Instructions:

- (a) Using the straight-line method, compute the annual depreciation that would have been charged from 1984 through 1993.

- (b) Compute the annual depreciation that would have been charged from 1994 through 2011.
- (c) Prepare the entry, if necessary, to adjust the account balances because of the revision of the estimated life in 2012.
- (d) Compute the annual depreciation to be charged beginning with 2012.

Qno7: (Depreciation—Replacement, Change in Estimate) Peloton Company constructed a building at a cost of \$2,400,000 and occupied it beginning in January 1991. It was estimated at that time that its life would be 40 years, with no salvage value.

In January 2011, a new roof was installed at a cost of \$300,000, and it was estimated then that the building would have a useful life of 25 years from that date. The cost of the old roof was \$180,000.

Instructions:

- (a) What amount of depreciation should have been charged annually from the years 1991 to 2010? (Assume straight-line depreciation.)
- (b) What entry should be made in 2011 to record the replacement of the roof?
- (c) Prepare the entry in January 2011, to record the revision in the estimated life of the building, if necessary.
- (d) What amount of depreciation should be charged for the year 2011?

Qno8: (Error Analysis and Depreciation, SL and SYD) Kawasaki Company shows the following entries in its Equipment account for 2011. All amounts are based on historical cost:

Equipment			
2011		2011	
Jan. 1	Balance	133,000	
Aug. 10	Purchases	32,000	
12	Freight on equipment purchased	700	
25	Installation costs	2,500	
Nov. 10	Repairs	500	
		June 30	Cost of equipment sold (purchased prior to 2011)
			23,000

Instructions:

- (a) Prepare any correcting entries necessary.
- (b) Assuming that depreciation is to be charged for a full year on the ending balance in the asset account, compute the proper depreciation charge for 2011 under each of the methods listed below. Assume an estimated life of 10 years, with no salvage value. The machinery included in the January 1, 2011, balance was purchased in 2009.

Operational Level 1

Fundamentals of Financial Accounting

- (1) Straight-line.
- (2) Sum-of-the-years'-digits.