

**ARBA MINCH UNIVERSITY**

**FACULTY OF BUSINESS AND ECONOMICS**

**DEPARTMENT OF ACCOUNTING AND FINANCE**



# **Principles of Accounting II**

## **Module II**

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*&*

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## **Preface**

To day's educational environment is challenging for accounting and finance educators. In addition to striving to be innovative as we provide our students with a technically appropriate curriculum we are also working diligently to help them develop critical thinking, communication and life long learning skills.

Accounting and Finance is one of the areas of specialization identified under faculty of business and economics. It has often been called the "language of business." It is because people in the business world use accounting information to make business decisions efficiently. In addition to business organizations, government agencies and other not for profit organizations use accounting as a basis for controlling their resources and measuring their accomplishments

This module is intended to assist students in identifying and analyzing accounting for plant assets, natural resources and intangible assets, accounting for payroll, accounting for partnerships and accounting for corporations. The material is prepared in simplified manner by incorporating ideas from various related books. More over, it approaches the aforementioned accounting issues with a unique narrative style by giving detailed and comprehensive notes for each chapter, quick check tests for each section, chapter review, glossary of concepts and terms and review questions at the end of each chapter. These all contributes a lot for students to achieve the learning objectives expected from all chapters of the material.

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*2008*

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## **CHAPTER ONE**

### **ACCOUNTING FOR PLANT ASSETS, NATURAL RESOURCES AND INTANGIBLE ASSETS**

#### **Aims and Objectives**

This chapter aims at discussing the meaning and nature of plant assets, costs of acquisition and depreciation of plant assets. The unit also discusses the different methods of computing depreciation and the accounting procedures involved in recording the transactions relating to disposal of plant assets.

Dear students after going through this portion, you will be able to;

- ❖ Describe & illustrate the accounting for the acquisition of plant assets.
- ❖ Describe the nature of depreciation.
- ❖ Describe and illustrate the accounting for depreciation.
- ❖ Describe & illustrate the accounting for plant asset dispositions
- ❖ Describe & illustrate the accounting for Natural Assets and intangible Assets

## **1.1 Introduction**

Most business enterprise holds such major assets as land, buildings, equipments, furnitures, tools, and etc. These assets help produce revenue over many periods by facilitating the production and sale of goods or services to customers. Because these assets are necessary in a company's day-to-day operations, companies do not sell them in the ordinary course of business

Plant Assets are long-term or relatively permanent tangible assets owned by a business and used in the operation of the business. These assets are not-held for sale. Other descriptive titles for such assets are fixed assets or property, plant and equipment. Specific terms frequently used are equipment, furniture, tools machine, buildings and land. These are expected to last more than a year.

## **1.2 Nature of plant Assets**

Plant Assets are long-term or relatively permanent tangible assets owned by a business and used in the operation of the business. These assets are not-held for sale. Other descriptive titles for such assets are fixed assets or property, plant and equipment. Specific terms frequently used are equipment, furniture, tools machine, buildings and land. These are expected to last more than a year.

### Characteristics of plant Assets

- Plant assets are held for use, not for sale
- Plant assets are long lived
- Plant assets are tangible- have physical existence
- Plant assets provides service for relatively several periods
- Plant assets are relatively fixed or permanent in nature.

### Examples of Plant Assets

- Land
- Buildings

- Machinery
- Vehicles etc

Plant assets are classified in to two as having:

- Indefinite economic life- land and
- Definite economic life- all other plant assets with exception of land like Buildings, Machinery and Vehicles

### **1.3 Determination of the Acquisition Cost of Plant assets**

The term expenditure refers to a payment or an obligation to make future payment for an asset, such as a truck, or a service, such as a repair. Expenditures may be classified as capital expenditures or revenue expenditures. A capital expenditure is expenditure for the purchase or expansion of long term asset. Capital expenditures are recorded in the asset accounts because they benefit several futures accounting periods. Revenue expenditure is an expenditure related to the repair, maintenance, and operation of long term asset. This expenditure doesn't extend the life of the original asset.

The acquisition cost of plant (fixed) assets is the cash or cash-equivalent purchase price, including incidental costs required to complete the purchase, to transport the asset, and to prepare it for use.

For example, expenditures related to the acquisition of a plant asset such as freight, insurance while in transit and installation are included in the cost of the asset because they are necessary if the asset is to function. According to the matching principle, therefore, such costs are allocated to the economic life of the asset rather than charged as expenses in the current period.

## Land

The acquisition cost of land includes the negotiated cash price plus other costs such as the cost of land surveys, legal fees, title fees, broker's commissions, cost of preparing the land to build on, and even the demolition costs of old structures that might be torn down to get the land ready for its intended use. Under the historical cost assumption, land is reported in the balance sheet at its original cost. Land is not subjected to depreciation because land does not have a limited useful life.

The following illustration will help us how to determine the cost of land.

### Example

A business enterprise acquires a piece of land for future site. It pays a cash price of Br. 210,000, pays brokerage fees of Br. 7500 and title fees of Br. 3000, pays Br. 5000 to have unwanted building removed, and pays, Br. 1500 to have the site graded. The business receives Br. 2000 salvage from the old building.

### Solution

The cost of the land is determined as follows:

Cash prices (negotiated price).....	Br. 210,000
Title Fees.....	3,000
Brokerage Fees.....	7,500
Cost of Grading.....	1,500
Cost of removing (demolition) unwanted building.....	Br. 5000
Less: Salvage received.....	3,000
Total cost of land.....	<u>Br. 224,000</u>

Generally, land is part of property, plant and equipment. If the major purpose of acquiring and holding land is speculative, it is more appropriately classified as an investment. If the land is held on a real estate concern for resale, it should be classified as inventory. When the land has been purchased for the purpose of constructing a building, all costs incurred up to the excavation for the new building are considered land costs. Removal of old buildings clearing, grading and filling are considered land costs because

these costs are necessary to get the land in condition for its intended purpose. Any proceeds obtained in the process of getting the land ready for its intended use, such as salvage receipts on the demolition of an old building are treated as reductions in the price of the land.



#### **Quick Check**

1. Can you define fixed asset?
2. Lists examples of fixed asset.
3. What costs are included when new equipment & second hand equipment are purchased?

#### ***Cost of buildings***

When an existing building is purchased its cost includes, the purchase price plus all repairs and other expenses required to put it in a usable conditions. On the other hand, when a business constructs a new building, the cost includes all reasonable and necessary expenditures, such as those for materials, labor, part of the overhead and other indirect costs, engineers and architects' fees, insurance during construction, interest incurred on construction loans during the period of construction, lawyers' fees, and building permits. If outside contractors are used in the construction, the net contract price plus other expenditures necessary to put the building in usable condition are included.

In some cases it is difficult to determine whether costs should be included as part of land or as part of constructing building. For instance cost of paving Public Street, bordering the land. In this case cost of paving the street is part of land. Cost of constructing walk way around the building is part of building, if they are expected to last only as long as the building. Costs that are neither as permanent as land nor directly related to a building are called land improvements. Examples of such Items are cost of shrub, fences, out door lightening and paved parking area.

### ***Cost of equipment***

The term “equipment” in accounting includes office equipment, store equipment, factory equipment, delivery equipment, machinery, furnitures and fixtures, and similar fixed assets. The cost of such assets includes the invoice (purchase) price, transportation and handling charges, insurance on the equipment while in transit, assembling and installation costs, and costs of conducting trial runs. As indicated earlier, all costs of getting an asset ready for its intended use are costs of that asset.

#### **Example:**

The following data relates to a firms purchase of machinery to be used in its manufacturing plant.

Invoice price	br 40,000
Sales tax	1,500
Freight paid	300
Insurance while in transit	100
Installation	800
Testing and adjusting	500
Repair for damage during installation	200

**Required?** Determine the initial amount at which machinery should be recorded.

The total cost of the machinery includes all cost components except repair for damage during installation. Therefore the total cost equals to Birr 42,900 (40,000 + 15000 + 300 + 100 + 800 + 500). Cost of repair for damage during installation is not cost of equipment

**Group purchase:** sometimes land and other assets are purchased for a lump sum. Because land is a non depreciable asset that has an unlimited life, it must have a separate ledger account, and lump-sum purchase price must be apportioned between land and other asset.

**Example:**

Assume that building and the land on which it is suited are purchased for a lump sum payment of br 85,000. Legal fees and brokerage commissions incurred associating these purchases were br 4,000 and br 1,000 respectively.

**Required?** Determine the amount at which each plant asset should be recorded if the fair market value of the land and buildings are br 10,000 and br 90,000 respectively

Total cost of building and land equals to birr 90,000 (85000+ 4000+ 1000)

$$\begin{aligned} \text{Cost of Building} &= \frac{90,000}{10,000+90,000} \times 90,000 = \mathbf{br\ 81,000} \\ \text{Cost of Building} &= \frac{90,000}{10,000+90,000} \times 10,000 = \mathbf{br\ 9000} \end{aligned}$$

**1.4 Accounting for Depreciation**

Depreciation is the accounting of the deterioration of the physical and functional utility of a fixed asset due to usage and time. Depreciation can be explained in economic or accounting terms. While economic depreciation is useful in understanding the concept of depreciation, we will be focusing primarily on accounting depreciation. Our objective for studying accounting depreciation is to learn how to amortize the cost of fixed assets. Accounting depreciation is a way of writing off the investment on fixed assets by prorating over a certain period.

The accounting depreciation methods we will study are of two types: book and tax depreciation. Book depreciation is done for the use of the company to report its financial status to its stockholders and other related people. Tax depreciation is done for the purpose of calculating taxes.

**Causes of Depreciation:** can be functional and physical depreciation

- ❖ **Functional depreciation:** includes the inappropriateness of the asset for performing the required functions. This can happen due to increased demands for

productivity that exceed the asset's capacity. Another example of functional depreciation is obsolescence, where the asset becomes obsolete over time. This occurs where technological advances cause the asset's output to be no longer needed, or result in newer assets that can produce a higher quality output at the same or lower price.

- ❖ **Physical depreciation:** is the normal "wear and tear" of the asset over time. As the asset is used, it becomes more costly to operate (due to repairs, increased levels of defective output, etc.). Eventually, given enough time, most assets will cease being productive at all because of physical depreciation.

Four factors affect the computation of depreciation. They are:

- |                    |                                       |
|--------------------|---------------------------------------|
| (1) Cost           | (3) Depreciable cost, and             |
| (2) Residual value | (4) Estimated economic (useful) life. |

**Cost-** is the net purchase price plus all reasonable and necessary expenditures to get the asset in place and ready for use.

**Residual value-** also known as *salvage value*, disposal value, scrape value, or trade-in value represents the estimated market value of the asset at the time of its retirement.

**Depreciable cost** - represents the difference between the asset cost and its estimated residual value. For example, an item of equipment that costs Br. 15000 and has a residual value of Br. 1000 would have a depreciable cost of Br. 14000, (Br. 15000 - Br. 1000). The depreciable costs must be allocated over the estimated economic life of the asset.

**Estimated economic (useful) life-** the estimated economic life of an asset is the total number of service units expected from the asset. Service units may be measured in terms of years the asset is expected to be used, units expected to be produced, miles or kilometers expected to be driven, or similar measures. In determining the estimated useful life of an asset, the accountant should consider all relevant information, including (1) past experience with similar repair assets, (2) the asset's present condition, (3) the company's repairs and maintenance policy, (4) current technological and industry trends, and (5) local conditions such as weather .

## Recording Depreciation

Depreciation is recorded at the end of the accounting period and adjusting entry that takes the following form.

Depreciation Expense .....xx  
Accumulated Depreciation- asset name ..... xx  
*To record depreciation for the period*

### ★ Quick Check

1. Can you define fixed asset?
2. Lists examples of fixed asset.
3. What costs are included when new equipment & second hand equipment are purchased? .

## Depreciation computation Methods

There are many depreciation methods fro allocating the cost of a plant asset over the accounting periods in its useful life. The most common methods of computing depreciation for plant assets are:

- (1) The straight line method
- (2) The units of production method
- (3) The double-declining balance method, and
- (4) The sum-of- the years-digits method.

The last two methods some times called Accelerated Depreciation Methods. Since it charges relatively large amount of depreciation to the earlier useful life of an asset and smaller amount to the later useful life.

### 1.4.1 The straight line method

Under Straight Line Method, a constant amount is written off as depreciation every year over useful life of the asset. The straight line method is based on the assumption that depreciation depend only on the passage of time. The straight-line method is based on the assumption that depreciation depends only on the passage of time. The depreciation

expense for each accounting period is computed by dividing the depreciable cost by the estimated useful life, as shown below-

$$\text{Depreciation} = \frac{\text{Cost - salvage value}}{\text{Charge Years of economic life}}$$

**Example:**

Grace consultants acquires a new computer (office equipment) at a cost of Birr 9000. It is estimated that the computer has an estimated residual value of Birr 1000 at the end of its estimated useful life of 4 years. The yearly (annual) depreciation would be Birr 2000 computed as follows:

$$\begin{aligned} \text{Annual depreciation} &= \frac{\text{Cost - Salvage value}}{\text{Estimated useful life}} \\ &= \frac{\text{Birr 9000} - \text{Birr 1000}}{4 \text{ years}} = \text{Birr 2000} \end{aligned}$$

The depreciation to be reported for each of the four years would be as follows:

**Depreciation Method- Straight-Line Method**

Year	Cost	Yearly Depreciation	Accumulated Depreciation	Carrying value (Book Value)
Beginning of first year	Br. 9000	-	-	Br. 9000.00
End of first year	9000	Br. 2000	Br. 2000.00	7000.00
End of second year	7000	2000	4000.00	5000.00
End of third year	5000	2000	6000.00	3000.00
End of fourth year	3000	2000	8000.00	1000.00

*Note that:* There are three important points to note from the depreciation schedule for the straight-line depreciation method. First, the depreciation is the same each year. Second, the accumulated depreciation increases uniformly. Third, the carrying (Book) value decreases uniformly until it reach the estimated residual value.

### 1.4.2 Units of Production Method

The production method of depreciation is based on the assumption that depreciation is mainly the result of use and that the passage of time plays no role in the depreciation process. Depreciation charge in each accounting period depends on the amount of out put produced. The formula is as follows;

$$\text{Depreciation} = \frac{\text{Cost} - \text{Salvage value}}{\text{Estimated units of out put}}$$

Per unit

$$\text{Depreciation Charge} = \text{units of out put produced/hrs used} \times \text{Depreciation per unit}$$

**Example:** If we assume that the office equipment from the previous illustration has an estimated useful life of 10,000 hours, the depreciation cost per hour would be determined as follows:

$$= \frac{\text{Birr } 9000 - \text{Birr } 1000}{10,000\text{hours}} = \text{Birr } 0.8\text{per hour}$$

If we assume that the use of the equipment was 2800 hours for the first year, 3600 hours for the second, 2400 hours for the third, and 1200 hours for the fourth, the depreciation schedule for the office equipment would appear as follows:

#### Depreciation Schedule – Production Method

Year	Cost	Hours	Depreciation Per Hour	Yearly Depr.	Accum. Depr.	Carrying value (Book value)
Beginning of the First year	Br. 9,000	-	Br. 0.80	-	-	Br. 9,000.00
End of first year	9,000	2,800	0.80	2240	2240	6760.00
End of second year	9,000	3,600	0.80	2880	5,120.00	3880.00
End of third year	9,000	2,400	0.80	1920	7,040.00	1960.00
End of fourth year	9,000	1,200	0.80	960	8,000.00	1000.00

### 1.4.3 Declining Balance Method

This method of depreciation results in relatively large amount of depreciation in the early years of an assets life and smaller amounts in later years. This method is based on the assumption of the passage of time. Since most kinds of plant assets are most efficient when new, and so they provide more and better service in the early years of useful life. It is consistent with the matching rule to allocate more depreciation to the early years than to later years if the benefits or services received in the early years are greater.

Depreciation is computed by applying a fixed rate to the carrying value of a tangible long lived asset resulting in higher depreciation charges during the yearly years of the asset's useful life. The most common rate to be used is a percentage equal to twice the straight line depreciation percentage rate and hence it is called Double Declining Balance Method. The formula is as follows:

$$\text{Double Declining Depreciation Rate} = \frac{100\%}{\text{Economic life}} \times 2$$

$$\text{Depreciation Charge (at beginning)} = \text{Book value} \times \text{Rate}$$

#### Example

Referring to the previous example, the equipment had an estimated useful life of four years. Consequently, under the straight-line method, the depreciation rate for each year was 25 percent, (100/ estimated useful life of the asset for 100/ 4 years).

$$\text{Double Declining Depreciation Rate} = \frac{100\%}{4} \times 2 = 50\%$$

Therefore, under the double-declining balance method, the fixed rate is 50 percent (2X 25 percent). The depreciation schedule for this method is as follows:

### Depreciation Schedule, Double-Declining Balance Method

Year	Cost	Fixed Depr. Rate	Yearly Depreciation	Accumulated Depreciation	Carrying Value (BV)
Date of purchase	Br. 9000	50%	-	-	Br. 9000
End of first year	9000	50%	Br. 4500	4500	4500
End of Second year	9000	50%	2250	6750	2250
End of third year	9000	50%	1125	7875	1125
End of fourth year	9000	50%	125	8000	1000

**NB.**

- *The fixed rate of 50% is always applied to the Book value at the end of the previous year. The depreciation is greatest in the first year and declines each year after that.*
- *The depreciation in the last year is limited to the amount necessary to reduce book value to residual value, Br. 125 = Br. 1125 – Br. 1000 (i.e. Previous book value minus residual value).*

#### 1.4.4 The Sum of the Years Digits Method

Like the declining balance method, the sum of the years digits method provides a higher amount of periodic depreciation expense in the earlier use of the asset's life and a decline depreciation expense thereafter because a successively smaller fraction is applied each year to the depreciable cost of the asset. Another method of allocating (similar to double declining balance method) a large portion of the cost of an asset to the yearly years of its use. The depreciation rate to be used is a fraction, of which the numerator is the remaining years of useful life (as of the beginning of the year) and the denominator is the sum of the years of useful life.

$$\text{The sum of year's digit (SYD); } \text{SYD} = \frac{\text{EL} (\text{EL} + 1)}{2}$$

$$\text{Depreciation} = \frac{(\text{Cost} - \text{S.V.})}{\text{SYD}} \times \text{Remaining Economic life at beginning Charge}$$

Where  $EL =$  estimated life and  $S.V. =$  salvage value

**Example**

Refer to the above example (office equipment purchased by Grace Consultants)

$$SYD = \frac{4(4+1)}{2} = 10 \text{ or } 1 + 2 + 3 + 4 = 10$$

The numerator of the fraction, decreases year by year (4/10,3/10/2/10/1/10). At the end of the asset’s useful life, the balance remaining should be equal to the salvage value. The depreciation schedule for this method is as follows:

**Depreciation Schedule- Sum - Of - The - Years - Digits Method**

Year	Depreciable Cost	Rate	Yearly Depreciation	Accumulated Depreciation	Book Value
Date of purchase	Br9000	-	-	-	Br. 9000
End of first year	9000	4/10	3200	3200	5800
End of second year	9000	3/10	2400	5600	3400
End of third year	9000	2/10	1600	7200	1800
End of fourth year	9000	1/10	800	8000	1000

The above illustration for the sum of year’s digit method is based on the assumption that the first use of the asset coincide with the beginning of the fiscal period. When the first use of the asset does not coincide with the beginning of a fiscal year, it is necessary to allocate each full year’s depreciation b/n the two fiscal years benefited. Assuming that the asset in the example was placed in service after nine months of the fiscal year had been elapsed, the depreciation for that fiscal year would be Br. 800 computed as follows:

First year depreciation =  $4/10 \times (9000 - 1000) \times 3/12$ ..... Br. 800

Therefore, the depreciation for the second year would be .....Br. 4399.25

Computed as follows:

= 4/10 X (9000 – 1000) X 9/12.....	Br. 2400
= 3/10 X (9000 – 1000) X 3/12.....	<u>1999.25</u>

Total, second fiscal year depreciation..... Br. 4399.25

### **Comparison of Deprecation Methods**

The straight-line depreciation provides a uniform or equal depreciation charges to expense throughout the service life of the asset.

The production method of depreciation provides for periodic charges to depreciation expense that may vary considerably, depending upon the amount of usage of the asset. The production method does not generate a regular pattern because of the random fluctuation of the depreciation from year to year.

The major limitation of the production method is that it is not appropriate in situation in which depreciation is a function of time instead of activity. Another problem in using the production method is that an estimate of units of output or service hours received is often difficult to determine.

Both the declining balance and the sum of the years digits methods are referred to as accelerated depreciation methods, because they provides (report) relatively higher depreciation expense in the earlier uses of the life of the asset and a gradually declining periodic expense thereafter.

The main justification for this approach is that more depreciation should be charged in earlier years because the asset suffers its greatest loss of services in those years. Accelerated depreciation method also recognizes that changing technologies make some equipment lose their capacity to yield services rapidly. Thus, it is appropriate to allocate more to depreciation in the early years, than in later years.

Another argument in favor of an accelerated method is that repair (maintenance) expense is likely to be greater in later years than in early years. Thus, the reduced amounts of depreciation reported in later years of the asset's life are offset to some extent by increased repair (maintenance) expense.

#### **1.4.5 Partial Period Depreciation**

Occurs when assets are acquired on other than the first or last date of a firm's accounting period. There are two policy of partial period depreciation:

##### **a) Using Nearest whole month policy**

- ❖ If an asset is acquired on or before the 15<sup>th</sup> Date of any month, determine depreciation starting from the month of acquisition.
- ❖ If an asset is acquired after the 15<sup>th</sup> date of any month, determine depreciation starting from the month next to the month of acquisition.

##### **b) Using the Nearest Whole year policy**

- ❖ If an asset is acquired on or before sixth months of operation, determine depreciation starting from the year under consideration.
- ❖ If an asset is acquired after six months of operation, determine depreciation starting from the year next to the year under consideration.

#### ***Example***

Assume that on May 16, 2002 Grace Consultants purchased a delivery Truck for br36,400. The expected economic life of the Truck is six years (750,000 miles) with an estimated salvage value of br 6,400 at the end of its useful life. Fiscal year ends December 31.

### Required?

Compute the depreciation charge for the years 2002 and 2003 using nearest whole month policy and if no policy is followed under the following methods:

- a) Straight Line method
- b) Units of production if the Truck was driven 90,000 and 142,500 miles during 2002 and 2003 respectively.

### Solution

- a) Since May 16 is after 16<sup>th</sup> day, the depreciation will start from the next month, June to December 31, which is for 7 months

$$SL = \frac{36400-6400}{6} = 5000$$

Therefore Depreciation for year 2002 equals to  $7/12 \times 5000 = 2916.66$ . While the depreciation for the next year(2003) is for the full year(from January 1 to December 31,2003) and hence the depreciation equals to 5000birr.

- b) On the other hand units of production method doesn't affected by the date of purchase of the asset. This is because units of production method depreciation calculated not based on passage of time rather usage rate. And hence the depreciation is as follows:

$$\text{Depreciation Rate} = \frac{36400-6400}{750,000 \text{ miles}} = 0.04 \text{ birr/miles}$$

Depreciation for 2002 for 90,000 miles =  $0.04 \text{ birr/miles} \times 90,000 \text{ miles} = 3600 \text{ birr}$

Depreciation for 2003 for 142,500 miles =  $0.04 \text{ birr/miles} \times 142,500 \text{ miles} = 5700 \text{ birr}$

**NB.** In the above example, depreciation was recorded from the beginning of June. If the equipment had been purchased on before May 15, or thereafter, depreciation would be calculated beginning May 1, as if the Machinery were purchased on that date.

### 1.5 Revision of periodic Depreciation

As depreciation is based on the estimated life of the asset, there may be errors in estimating the life of the asset which in turn causes an error in the yearly depreciation expense. The periodic depreciation may be inadequate or excessive which stems either from underestimate or overestimate of the asset's useful life or from the wrong estimate of the residual value. To compute depreciation in later years the revised economic life, salvage value and book value of the asset at the time of revision is used, the remaining book value (undepreciated cost) is allocated to the remaining life of the asset. When a revision is made on the life of the asset, past depreciation which has been recorded will not be affected.

#### Example

Saint Gebriel hospital purchased a special x – ray machine for its operating room. The machine which cost br 311,560 was expected to last ten years, with an estimated residual value of br 31, 560. After two years of operation ( and depreciation charges using straight line method), it became evident that the x- ray machine would last a total of only seven years with a salvage value of br 38,560 at the end of its seventh years of useful life.

**Required:** Determine the revised depreciation charge for the third year of operation.

$$\text{Accumulated depreciation for two years} = \frac{\text{br } 311,560 - 31, 560}{10} \times 2 = 56,000\text{birr}$$

$$\text{New Book Value} = \text{br } 311,560 - 56,000\text{b} = 255,560\text{birr}$$

$$\text{New Deprciation charge} = \frac{255,560\text{birr} - 38,560}{7} = 31,000\text{birr}$$

### 1.6 Revenue and Capital expenditures

Expenditures incurred after acquiring and placing the asset in service may be classified as revenue or capital expenditures depending on the nature of the expenditure.

## **I. Revenue Expenditures**

- ❖ Revenue Expenditures are expenditures that benefit only current accounting period.
- ❖ Revenue Expenditures are recurring and increase neither economic life nor capacity of an asset.
- ❖ Revenue expenditures do not extend the asset's original useful life but are necessary to enable the asset to fulfill its original useful life.
- ❖ Revenue expenditures are recorded in the expense accounts since their benefits are realized in the current accounting period.
- ❖ Expenditures that are small in amount but can have the capacity of benefiting several accounting periods are also classified as revenue Expenditures.

## **II. Capital Expenditures**

- ❖ Capital Expenditures are expenditures that benefit several accounting periods.
- ❖ Capital Expenditures are not recurring and increase the useful life, operating efficiency or capacity of an asset beyond the original amount.

### **Examples:-**

- Additions- an addition is an enlargement to the physical layout of a plant asset, such as the addition a new wing to a building.
  - Additions are debited to the asset account since the benefits from the expenditures are received over several years.
- Betterments- an improvement that does not add to the physical layout of a plant asset but rather increases the quality of the asset or its output- such as the installation of an air conditioning system.
  - Costs of betterments are also debited to the asset accounts.
- Extraordinary repairs- are repairs of a more significant nature that affect the estimated residual value or estimated useful life of an asset.

- Recorded by debiting the accumulated depreciation account there by increasing the carrying value of the asset by the cost of extraordinary repair.
- The new carrying value of the asset is depreciated over the new estimated useful life.

**Example**

Suppose for example, a machine costing Br. 35,000 had no estimated residual value and an original estimated useful life of ten years, has been depreciated for 7 years. At the very beginning of the 8th year, the machine was given a major overhaul costing Br. 3000. This expenditure extended the useful life of the machine 3 years beyond the original estimate. The computation of the new book value and the entry for the extraordinary repair would be as follows:

**Solution**

To record extraordinary repair

Jan. 4. Accumulated Depreciation – Machinery.....	3000.00
Cash .....	3000.00
Extraordinary repair to machinery	

The revised annual depreciation for each of the six years remaining in the machine’s useful life would be calculated as follows:

Cost of Machine.....	Birr 35,000
Accum. Depreciation before extraordinary repair	Br. 24,500
<b>Less:</b> extraordinary repair (Debited to Accum. Depr.)....	<u>3000</u> <u>21,500</u>
Book value (carrying value) after extraordinary repair...	Br.13,500

Revised Annual periodic depreciation= 13500.....2,250

6 years

## 1.7 Disposal of plant assets

Worn out or obsolete plant assets that are no longer useful may be discarded, sold or traded in on new plant assets. A plant asset may be disposed in three different ways: It may be-

- Discarded
- Sold for cash, or
- Exchanged for another asset.

General procedures to be followed for disposing plant assets are:-

- Record depreciation up to the date of disposal
- Determine any gain or loss on disposal
- Remove the cost and accumulated depreciation balances relating to the asset.

### 1) Discarding of plant assets

A Plant asset is discarded when it has no value in the salvage market. Loss on disposal equals to the book value of the asset if the asset is not fully depreciated. If the asset is fully depreciated no gain or loss results on disposal. Gain and loss on disposal of plant asset are classified as other revenues and expenses on the income statement.

#### Example

Grace consultants bought machinery costs 6500birr. The machinery depreciated over the estimated life and has accumulated depreciation of birr 4650birr. The company decided to discard the machinery.

**Required:** pass the necessary journal entry

Accumulated depreciation, Machinery.....	4650
Loss on disposal of machinery.....	1850
Machinery.....	6500

(To discard machinery)

## 2) Sale of plant assets for cash

The entry to record a plant asset sold for cash is similar to one just illustrated in the above except that the receipt of cash should be recorded

### Example

Grace consultants bought machinery costs 6500birr. The machinery depreciated over the estimated life and has accumulated depreciation of birr 4650birr. The company decided to sell the machinery at;

- a) Birr1000
- b) Birr1850
- c) Birr2000

**Required:** record the disposal of the above asset

a). The carrying value of the machinery equals to birr 1850 (6500-4650), but the machinery sold at birr 1000 and hence a loss of 850 birr (1000-1850) will be recorded from the disposal.

Cash.....	1000
Accumulated depreciation, Machinery.....	4650
Loss on disposal of machinery.....	850
Machinery.....	6500

b). There is no gain or loss since the machine is sold at book value/ carrying value of birr 1850 (6500-4650).

Cash.....	1850
Accumulated depreciation, Machinery.....	4650
Machinery.....	6500

c). The carrying value of the machinery equals to birr 1850 (6500-4650), but the machinery sold at birr 2000 and hence a gain of 150 birr (2000-1850) will be recorded from the disposal.

Cash.....	2000
Accumulated depreciation, Machinery.....	4650
Machinery.....	6500
Gain on disposal of machinery.....	150

**(3) Exchange of plant assets for cash**

Businesses also dispose of plant assets by trading them in on the purchase of other plant assets. Exchanges may involve similar assets, such as an old machine traded-in on a newer model, or dissimilar assets, such as a machine traded-in on a truck. In either case, the purchase price is reduced by the amount of the trade-in allowance.

The basic accounting for exchanges of plant assets is similar to accounting for sales of plant assets for cash. If the trade-in allowance received is greater than the carrying value of the assets surrendered, there has been a gain. If the trade-in allowance is less than the carrying value, there has been a loss.

There are special rules for recognizing these gains and losses, depending on the nature of the assets exchanged.

<b>Exchange</b>	<b>Losses Recognized</b>	<b>Gains Recognized</b>
-----------------	------------------------------	-----------------------------

***For Financial Reporting Purposes:***

- Of similar assets..... Yes.....No
- Of Dissimilar assets..... Yes..... Yes

***For Income Tax purposes:***

- Of similar assets..... No..... No
- Of dissimilar assets..... Yes..... Yes

Both Gains and Losses are recognized when a company exchanges dissimilar assets. Assets are dissimilar when they perform different functions; assets are similar when they perform the same function.

For financial reporting purposes, gains on exchanges of similar assets are not recognized because the earning lives of the asset surrendered are not considered to be completed.

When a company trades-in an older machine on a newer machine of the same type, the economic substance of the transaction is the same as that of a major renovation and upgrading of the older machine.

Accounting for exchange of similar assets is complicated by the fact that neither gains nor losses are recognized for income tax purposes.

***Loss Recognized on the Exchange***

A loss is recognized for financial reporting purposes on all exchange in which a material loss occurs.

***Illustration***

To illustrate the recognition of a loss, assume that the business exchange a machine with a cost of Br. 11,000, and accumulated depreciation of Br. 9000 for a newer more modern machine on the following terms:

Cost of new machine .....	Birr 12000.
Trade-in Allowance for old machine.....	<u>(1500)</u>
Cash payment required (Boot).....	Birr <u>10500.</u>

***Solution***

In the illustration above, the trade-in allowance (1500) is less than the carrying value (Br. 2000 i.e 11000-9000) of the old machine. The loss on the exchange is Br. 500, (Br. 2000 – Br. 1500). Therefore, the journal entry required to record the exchange of assets would be as follows:

**Year 5.**

July 5. Equipment (New).....	12,000.00
Accum. Depreciation-Equip.....	9,000.00
Loss on Exchange of plant assets.....	500.00
Equipment (old).....	11,000.00
Cash.....	10,500.00

***Loss Not Recognized on the Exchange***

In the previous illustration, in which a loss was recognized, the new asset was recorded at the purchase price of Br. 12000 and a loss of Br. 500 was recognized. If the transaction is for similar assets and is to be recorded for income tax purpose, the loss should not be recognized. In this case, the cost basis of the new asset will reflect the effect of the unrecorded loss. The cost basis for the new asset, therefore, is computed by adding the cash payment to the carrying value of the old asset:

Carrying (Book) value of old Equipment.....	Birr 2,000.00
Cash paid (Boot given).....	<u>10,500.00</u>
Cost-basis of new Equipment .....	Birr <u>12,500.00</u>

Note that no loss is recognized in the entry to record this transaction.

**Year 5.**

July 5. Equipment (New).....	12,500.00
Accumulated Depreciation.....	9,000.00
Equipment (old).....	11,000.00
Cash.....	10,500.00

*To record exchange of Equipments - cost of old Equipments and its related Accumulated Depreciation removed from the accounts; new equipment recorded at amount equal to book value of old equipment plus boot given.*

**NB.** The new equipment is recorded (reported) at a purchase price of Br. 12000 plus the unrecognized loss of Br. 500. Since depreciation of the new equipment will be computed

based on a cost of Br. 12500 instead of Br. 12000, the “unrecognized” loss results in more depreciation each year on new equipment than the loss had been recognized.

***Gain Recognized on the Exchange***

Gains on exchanges are recognized for financial reporting purposes when dissimilar assets are exchanged. To illustrate the recognition of a gain, assume the following terms in which the machines being exchanged serve different functions:

Price of new machine.....	Birr 12,000.00
Trade-in Allowance for old machine.....	<u>(3000)</u>
Cash payment required (Boot given).....	Birr <u>9,000.00</u>

Here the trade-in allowance (Br. 3000) exceeds the carrying value (Br. 2000) of the old machine by Br. 1000. thus, there is a gain on the exchange, if the trade-in allowance represents the fair mark value of the old machine. Assuming that this condition is true, the entry to record the transaction is as follows:

**Years 5**

July 5. Equipment (New).....	12,000
Accumulated Depreciation.....	9,000
Equipment (old).....	11,000
Cash .....	9,000
Gain on exchange of Equip.....	1,000

*To record the exchange of Equipments to remove cost of old equipment and the related accumulated depreciation, new equipment recorded at cost price; gain recognized.*

***Gain Not Recognized on the Exchange:***

A gain on an exchange should not be recognized in the accounting records if the assets perform similar functions. The cost basis for the new equipment must indicate the effect of the unrecorded gain. This cost basis is computed by adding the cash payment to the carrying value of the old asset:

Carrying value of old equipment .....	Birr 2,000.00
Cash paid (Boot Given).....	<u>9,000.00</u>
Cost basis of new Equipment.....	Birr <u>11,000.00</u>

The entry to record the transaction is as follows:

**Years 5**

July 5. Equipment (New).....	11,000.00
Accumulated Depreciation.....	9,000.00
Equipment (old).....	11,000.00
Cash.....	9,000.00

*To record exchange of Equipment to remove the cost of old equipment and the related accum. depr. of old assets; new equipment recorded at a cost equal to Book Value(BV) of old asset plus cash paid.*

As with the no recognition of losses, the no recognition of the gain on exchanges is, in effect, a postponement of the gain. Since depreciation will be computed on the cost basis of Br. 11,000, the “unrecognized” gain is reflected in less deprecation each year on new equipment than if the gain had been recognized.



**Quick Check**

1. Can you differentiate among discarding fixed asset, selling fixed asset and exchange similar fixed asset?
2. Can you define trade -in-allowance and boot?

## 1.8 Accounting For Intangible Assets and Natural Resources

### i. Intangible Assets

The defining characteristic of an intangible is the lack of physical existence. Nevertheless, such assets contribute to the earnings capability of a company. Examples include patents, copyrights, trademarks, brands, franchises, and similar items. A company develops many such items via ongoing business processes, and those internally developed intangibles may not appear on the corporate accounts. Those intangible benefits represent an invisible asset of the company. Intangible assets are characterized by: long lived, held for use not for sale, lacks physical existence and have a capacity to provide benefit for several periods

On the other hand, intangibles may be purchased from another party. For example, one company may need to utilize technology embedded in a patent right belonging to someone else. When intangibles are purchased, the cost is recorded as an intangible asset. When a purchased intangible has an identifiable economic life, its cost is "amortized" over that useful life (amortization is the term to describe the allocation of the cost of an intangible -- just as depreciation describes the allocation of the cost of plant assets like machinery , equipments). Some intangibles have an indefinite life and those items are not amortized; instead, they are periodically evaluated for impairment. If they are never found to be impaired, they will permanently remain on the balance sheet. The unamortized/unimpaired cost of intangible assets is positioned in a separate balance sheet section immediately following Property, Plant, and Equipment.

### Some Specific Intangibles

**Patents** give their owners exclusive rights to use or manufacture a particular product. The cost of a patent should be amortized over its useful life (not to exceed its legal life of 20 years). Importantly, the cost of a patent does not include the research and development costs incurred in seeking the knowledge necessary for the patent. The amount included in

the Patent account includes only the cost of a purchased patent and/or incidental costs related to the registration of a patent (like legal fees).

**Copyrights** provide their owners with the exclusive right to produce or sell an artistic or published work. A copyright has a legal life equal to the life of the creator plus 70 years; the economic life is usually shorter. The economic life is the period of time over which the cost of a copyright should be amortized.

**Franchises** give their owners the right to manufacture or sell certain products or perform certain services on an exclusive or semi-exclusive basis. The cost of a franchise is reported as an intangible asset, and should be amortized over the estimated useful life.

**Trademarks/brands/internet domains** are another important class of intangible assets. Although these items have fairly short legal lives, they can be renewed over and over. As such, they have an indefinite life.

**Goodwill** is a unique intangible asset. Goodwill is the excess of the purchase price paid for another company over the fair value of the identifiable tangible assets acquired. Such excess may be paid because of the acquired company's outstanding management, earnings record, or other similar features. Goodwill is deemed to have an indefinite life.

### **Example**

On January 1 of the current year ABC pvt ltd co paid birr 51,000 registration fee and other related costs to obtain a patent on a new product. The company estimated that the patent will be commercially feasible for the coming ten years although its legal life is 20 years. Fiscal year ends December 31.

**Required:** Make the entry required on January 1 to record the patent and amortization expense on December 31.

The entry to record the patent would be as follows:

Jan 1. Patent.....	51,000
Cash.....	51,000

*To record the purchase of Bottle cap patent*

The entry to record the annual amortization would be as follows:

Dec 31 Amortization Expense.....	2550
Patent.....	2550

*To record annual amortization of patent (Br. 51,000/ 20 years)*

**ii. Natural Resources**

Oil and gas reserves, mineral deposits, thermal energy sources, and standing timber are just a few examples of natural resource assets that a firm may own. There are many industry-specific accounting measurements attributable to such assets. As a general rule, natural resources are initially entered in the accounting records at their direct cost plus logically related items like legal fees, surveying costs, and exploration and development costs. Once the cost basis is properly established, it must be allocated over the periods benefited through a process known as "depletion." Dear students you should think of it this way: depletion is to a natural resource as depreciation is to property, plant, and equipment.

**Depletion Calculations:** The cost of a natural resource (less any expected residual value) must be divided by the estimated units in the resource deposit; the resulting amount is depletion per unit. If all of the resources extracted during a period are sold, then depletion expense equals depletion per unit times the number of units extracted and sold. If a portion of the extracted resources are unsold resources, then the cost of those units (i.e., number of units times depletion per unit) should be carried on the balance sheet as inventory.

**Example**

Assume that MIDROC Construction purchased a mine site for birr 10,000,000. Assume the site is estimated to contain 5,000,000 tons of the targeted ore

The depletion rate established is computed in the following manner.

$$\frac{\text{Total cost} - \text{Salvage value}}{\text{Total estimated units available}} = \text{Depletion cost per unit.}$$

$$\frac{\text{Br. } 10,000,000}{5,000,000 \text{ tones}} = \text{Br. } 0.5 \text{ per tone}$$

If 100,000 grams are extracted in the first year, then the depletion for the year is 50,000 birr (100,000 x Br. 0.5). The entry to record the depletion is therefore:

Depletion Expense.....	50,000
Accumulated Depletion.....	50,000
	<i>To record annual depletion charge</i>

<p>★ <b>Quick Check</b></p> <ol style="list-style-type: none"><li>1. Can you list Intangible assets</li><li>2. Can you show intangible assets and authorizing intangible assets</li><li>3. Can you differentiate among depreciation, depletion &amp; amortization?</li></ol>
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## Review Questions

### Part I : Discussion

1. Carefully define depreciation.
2. Distinguish between service life and physical life.
3. What key factors affect the determination of service life?
4. Define book value, salvage value, depreciable base, and other concepts that are applicable to depreciation calculations.
5. Apply the straight-line method of depreciation, including situations involving partial periods.
6. Apply the units-of-output method of depreciation.
7. Apply the declining-balance method of depreciation, including situations involving partial periods.
8. Apply the sum-of-the-years'-digits method of depreciation, including situations involving partial periods.
9. Discuss the rationale behind the selection of depreciation methods.
10. How changes in estimates (e.g., useful life) are dealt with in the basic depreciation computations?
11. What method(s) provide(s) for a higher depreciation charge in the first year of service and gradually declining thereafter?
12. Do you include a generator purchased for use but stored in warehouse in fixed asset?
13. A firm purchased a building and land for warehouse and agreed to pay delinquent taxes. Should the last of delinquent tax be included as part of cost of property?
14. A Truck has a cost of Birr 256,000, Residual value of Birr 30,000 and estimated useful life of 12 years. What are
  - a. The depreciable cost
  - b. The straight line rate
  - c. Annual straight line depreciation
15. A truck cost of Birr 250,000, residual value of Birr 30,000 and estimated useful life of 12 years, what is the double-decline balance depreciation for the second full year?

16. The truck that cost Birr 250,000 residual value of Birr 30,000 and useful life of 200,000 miles. What are:-
- i. Depreciate rate per mile?
  - ii. First-year depreciation if 20,000 miles were drives?
17. A business purchased mineral rights of 250,000 tons of ore for Birr 6,000,000. If 35,000 tons of ore were mined in the first year. What are:-
- i. The Depletion rate per tons
  - ii. Depletion expense for the first year.
18. Identify whether each of the following transactions related to an office building is revenue expenditure (RE) or a capital expenditure (CE). In addition, whether each transaction is an ordinary repair (OR), an extraordinary repair (ER), and addition (A), a betterment (B), or none of these (N).
- a. The hallways and ceilings in the building are repainted at a cost of birr 7,400.00
  - b. The hallways, which have tile floors, are carpeted at a cost of Birr 25,000.00
  - c. A new wing is added to the building at a cost of birr 185,000.
  - d. Furniture is purchased for the entrance to the building at a cost of Birr 16,500.00
  - e. The air – conditioning system is overhauled at a cost of birr 20,700.00. The over haul extends the useful life of the air conditioning system by ten years

## Part II: Multiple Choices

1. Which of the following items should be expensed as incurred?
  - a. Broker's fees on the purchase of a long-lived asset.
  - b. Repair of damage occurring during installation of new equipment.
  - c. Freight charges on the purchase of equipment.
  - d. Normal installation fees on the purchase of equipment.
2. Lancer Corporation purchased a parcel of land as a factory site for br150,000. Construction began immediately on a new building. Costs incurred are as follows:

Architect's fees	25,000
Legal fees for land purchase contract	2,000
Construction costs	250,000

Lancer should record the cost of the new land and building, respectively, at:

- a. br150,000 and br275,000
  - b. br152,000 and br275,000
  - c. br150,000 and br250,000
  - d. br152,000 and br250,000
3. Reno Acquisitions Company recently bought a furnished hotel for a lump-sum purchase price of br15,000,000. Separately, the land was valued at br6,000,000, the building at br12,000,000, and the furniture and equipment at br2,000,000. How much cost should Reno assign to the land?
    - a. br1,000,000
    - b. br4,500,000
    - c. br6,000,000
    - d. br8,000,000
  4. Omni Corporation purchased a new vehicle on January 1, 20X1. The vehicle cost br100,000, has a five-year life, and a br20,000 residual value. Omni has a December 31 year-end. If Omni depreciates the truck by the double-declining balance method, how much should be recorded as depreciation expense during 20X4?
    - a. br0
    - b. br1,600
    - c. br8,640
    - d. br40,000

5. Realistic Company purchased a new truck on January 1, 20X1. The truck cost br20,000, has a four-year life, and a br4,000 residual value. The company has a December 31 year-end. If Realistic Company depreciates the truck by the sum-of-the-years'-digits method, how much should Realistic report as the book value of the truck at the end of 20X3?

- a. br1,600
- b. br2,000
- c. br5,600
- d. br14,400

6. On July 1, 20X1, Clem Company purchased factory equipment for br50,000. Residual value was estimated to be br2,000. The equipment will be depreciated over ten years using the sum-of-the-years'-digits depreciation method. Clem has a December 31 year-end, and during 20X1, one-half of a year's depreciation expense was recorded. How much depreciation expense should be recorded for 20X2? (round computations to the nearest dollar)

- a. br7,855
- b. br8,291
- c. br8,636
- d. br8,727

7. If a plant asset is acquired or retired on the first half of the month, it is treated as if the event had occurred:

- a. on the first day of the month.
- b. on the last day of that month.
- c. on the first day of the next month.
- d. on the last day of the next month.
- e. none of the above.

### **Part III: Exercise**

1. A machine has cost of Br. 80,000, an estimated residual value of Br 5,000, and estimated useful life of 5 years. What is the amount of annual depreciation computed by straight-line depreciation method?
2. A machine has a cost of Br 50,000, an estimated residual value of Br 5, 000 and expected to have a useful operating life of 15,000 hours,. During January the

- machine was operated for 1,200 hrs. What is the amount of depreciation for the month?
3. A machine acquired on January 10 at a cost of Br. 300,000 has an estimated useful life of 20 years and it will have no residual value. Determine the depreciation for each first 3 years
    - a) By straight-line depreciation method
    - b) By the decline method
    - c) By sum-of-years- digits method
  4. Equipment that costs Br. 47,500 has estimated useful life of 5 years. The equipment was placed in service on April 5 of the current period which ends on Dec. 31. determine depreciation of current fiscal period and the following fiscal period by:-
    - a) Straight line method
    - b) Decline method (twice the straight line rate.)
  5. An equipment with a cost of Br 310,000 has an estimated residual value of Br 10,000, estimated useful life of 40 years and is depreciated by straight-line method.
    - a) What is the amount of annual depreciation.
    - b) What is the value at the end of twenty-fifth year of service
    - c) At the start of twenty-sixth years it is estimated that the remaining life is 15 years and estimated residual value is Br 8,500. What is the depreciation expense for each of the remaining 15 years
  6. An equipment acquired on January 5, 2001 at a cost of Br 38, 750 has an estimated residual value of Br. 2,750 and estimated useful life of 6 years, and depreciated by straight-line method.
    - a) What was the book-value of equipment at the end of the year 2003?
    - b) Assume the equipment is sold on July1, 2004 for Br 10,000, Journalize the entries to record
      - i. Depreciation for 6 months
      - ii. The sale of Equipment

7. An equipment acquired on January 2, 2001 at a cost of Br. 21,000, has estimated useful life of 4 years and an estimated residual value of Br. 1, 250.
  - a) Using straight-line depreciation method, determine annual depreciation expense for year 2001, 2002, and 2003.
  - b) What was the book value of the equipment of January 1, 2003?
  - c) Assuming the equipment is sold on Jan 2, 2003 for Br. 5,250, Journalize the entry to record the sale
  - d) Assuming the equipment is sold on January 2, 2003 for 7,250 instead of Br 5,250 Journalize the entry to record the sale
8. A printing press priced at Br. 158,000 is acquired by - trading in a similar press and paying a cash for the difference between the trade-in allowance and the price of the new printing press.
  - a) Assuming that the trade-in allowance is Br. 28,000 what is the amount of boot given?
  - b) Assuming that the book value of the press traded-in is Br. 23,000 what is the cost of new press for financial reporting purpose?
  - c) What is the cost of new equipment for computing depreciation for federal income tax purpose.
9. Assuming the same facts in No. 9 except book value of the traded is Br 35,000
  - a) What is the amount of boot given
  - b) What is cost of the new press for financial reporting purposes.
  - c) What is the cost of the new press for computing depreciation for federal income tax purposes?
10. A Co. acquired mineral rights for Br. 15,000,000 the mineral deposited is estimated, 60,000,000 tons. During currently year 11,500,000 tons were mined and sold for Br. 3,500,000.
  - a) Determine the amount of depletion expense for the current year.
  - b) Journalize the adjusting enter to recognize the expense

11. AB Company acquired patents on January 3, 2000 for Br 1,020,000. The patent has a useful life equal to its legal life of 17 years. AB successfully defended the patent in a lawsuit at a cost of Br, 105,000 on January 5, 2003.
- a) Determine the amount of patent amortization expense for the current year ended December 31, 2003.
  - b) Journalize the adjusting entry to recognize the amortization.
12. What is the term applied to the periodic charge for
- a) Ore removed from earth
  - b) The use intangible asset

## **Part IV: Problems**

### **Problem 1**

Grace consultants purchased a new machine on October 1, 2001, at a cost of birr 144,000. The machine's estimated useful life at the time of the purchase was 6 years, and its residual value was birr 12,000.

### ***Instructions***

- a. Prepare a complete depreciation schedule, beginning with calendar year 2001, under each of the methods listed below (assume that the half-year convention is used):
  - ❖ Straight-line.
  - ❖ 200% declining-balance.
  - ❖ 150% declining-balance (not switching to straight-line).
- b. Which of the three methods computed in part a is most common for financial reporting purposes? Explain.
- c. Grace consultants sell the machine on December 31, 2004, for birr 40,000 cash. Compute the resulting gain or loss from this sale under each of the depreciation methods used in part a. Does the gain or loss reported in the company's income statement have any direct cash effects? Explain.

**Problem 2**

3F purchased new furniture for its store on April 1, 2001. The furniture is expected to have a 10-year life and no residual value. The following expenditures were associated with the purchase:

---

Cost of the furniture .....	Br10,000
Freight charges.....	350
Sales taxes.....	600
Installation of furniture .....	50
Cost to repair furniture damaged during installation .....	500

---

***Instructions***

- a. Compute depreciation expense for the years 2001 through 2004 under each depreciation method listed below:
  - i. Straight-line, with fractional years rounded to the nearest whole month.
  - ii. 200% declining-balance, using the half-year convention.
  - iii. 150% declining-balance, using the half-year convention.
- b. 3F has two conflicting objectives. Management wants to report the highest possible earnings in its financial statements, yet it also wants to minimize its taxable income reported to the FIRA. Explain how both of these objectives can be met.

### Problem 3

During the current year, James Construction disposed of plant assets in the following transactions:

**Jan. 6:** Equipment costing br 22,000 was given to a scrap dealer at no charge. At the date of disposal, accumulated depreciation on the office equipment amounted to br19,500.

**Mar. 3:** James sold land and a building for br 750,000, receiving br100,000 cash and a 5-year, 12% note receivable for the remaining balance. James's records showed the following amounts: Land, br 50,000; Buildings, br700,000; Accumulated Depreciation: Building (at the date of disposal), br300,000.

**Jul. 10:** James traded in an old truck for a new one. The old truck had cost br22,000, and its accumulated depreciation amounted to br18,000. The list price of the new truck was br40,000, but James received a br10,000 trade-in allowance for the old truck and paid only br30,000 in cash. James includes trucks in its Vehicles account.

**Sept. 3:** James traded in its old computer system as part of the purchase of a new system. The old system had cost br10,000, and its accumulated depreciation amounted to br8,000. The new computer's list price was br6,000. James accepted a trade-in allowance of br200 for the old computer system, paying br1,000 down in cash, and issuing a 1-year, 8% note payable for the br4,800 balance owed.

### Instructions

Prepare journal entries to record each of the disposal transactions. Assume that depreciation expense on each asset has been recorded up to the date of disposal. Thus, you need not update the accumulated depreciation figures stated in the problem.

## Chapter Review

Almost all business enterprises of any size or activity use assets of a durable nature. Such assets, commonly referred to as property, plant, and equipment, plant assets, or fixed assets, support the operating activities in every business organization, instead of being a part of the operating activities. Such assets include land, building, and equipments (machinery, furniture, tools).

The major characteristics of plant (or fixed) assets are:

- 1) they are acquired for use in the operations of a business, they are not intended for resale purpose. If the business holds them for resale they are categorized under the caption 'Inventories', in the balance sheet.
- 2) they are long-term in nature and usually subject to depreciation long-term assets are capable of repeated usage in the operating activities of the business, and
- 3) they possess physical features.

One of the big issues in accounting for plant assets is the determination of cost. The acquisition cost of a plant asset includes the cash or cash equivalent purchase price of obtaining the asset and bringing it to the location and condition necessary for its intended use.

***Cost of Land:*** Includes the negotiated cash price plus other costs such as the cost of land surveys, legal fees, broker's commissions, title fees, cost of preparing the land to build on, and the cost of tearing-down (or razing) old building, and any expenditures associated with the acquisition of land that are necessary to get the land ready for its intended use.

***Cost of buildings:*** Includes the purchase price plus all repairs and other expenses required to put it in a usable condition. When a business constructs a new building, the cost includes all reasonable and necessary expenditures, such as materials, labor, part of the overhead and other indirect costs, engineers and architects' fees, insurance during construction period, lawyers fees, and building permits.

***Cost of Equipments:*** Includes the invoice price, transportation and handling costs, insurance on the equipment while in transit, assembling and installation costs, and costs of conducting test (trail) runs.

As plant assets are used in the operation of a business, their value to provide services decreases through usage and the passage of time. This cost allocation of plant asset through usage and the passage of time are called *depreciation*.

Depreciation is frequently misunderstood. The term doesn't refer to the decrease in market value of an asset overtime; no it is a process of valuation. Instead, the term is used to describe the gradual conversion of the cost of the asset into an expense account. Four factors affect the computation of depreciation. They are:

- (1) cost, (2) residual value, (3) depreciable cost, and (4) estimated useful life of the asset. Business may be different methods to compute depreciation

The most common methods of computing depreciation for plant assets are (1) straight line method, (2) production method, (3) double-declining balance method, and (4) sum-of-years-digits method.

After the determination of periodic depreciation, the amount of depreciation expense should be recorded each fiscal period by debiting the depreciation expense and crediting a contra asset account called Accumulated Depreciation. The use of this contra asset account permits the original cost to remain unchanged in the plant asset account.

Sometimes each of the four depreciation methods may not be appropriated because the assets involved have unique characteristics or the nature of the industry requires that a special depreciation method be used. Of these methods, the group and composite methods are often used by business enterprises.

When a plant asset is acquired, depreciation rates area carefully determined based on past experience with similar assets and other relevant information, however, it may be necessary to revise the estimated economic life and that of salvage value during the life of the asset. Unexpected physical deterioration or unforeseen obsolescence may make the useful life of the asset less than originally estimated. Good maintenance procedures, revision of operating procedures, or similar improvements may prolong the life of the asset beyond the originals estimate.

After plant assets are acquired and ready for use, additional costs are incurred that range from ordinary repairs to significant additions. The major problem is allocating these costs to the proper time periods. These costs are divided into two major categories: capital, and revenue expenditures.

Capital expenditures are expenditures that improves the operating capacity (or efficiency) or expenditure that increases the useful life of the asset beyond the original estimate. The most common capital expenditures are (1) additions, (2) betterments, and (3) extraordinary repairs.

Revenue expenditures, on the other hand, are expenditures incurred in order to maintain the normal operating efficiency of the asset. The most usual kinds of revenue expenditures for a plant asset are the repairs, maintenance, lubrication, cleaning, and inspection necessary to keep an asset in good working condition. Such expenditures benefits only the current period and therefore must be charged against the revenue in the current fiscal period.

## Glossary

<b>accelerated depreciation methods</b>	Several alternative depreciation approaches that result in relatively more depreciation in early years of use, and smaller amounts during later years
<b>capital expenditures</b>	Ordinary and necessary costs incurred to place an item of property, plant, or equipment in its condition for intended use; such amounts are included in the asset account
<b>capital lease</b>	A lease that effectively transfers the risks and rewards of ownership to the lessee
<b>change in accounting estimate</b>	A revision of assumptions used in a related accounting calculation (e.g., change in estimated useful life of an asset); handled prospectively by revising current and future periods
<b>declining balance depreciation method</b>	An accelerated depreciation method by which a constant rate (that is a multiple of the straight-line rate) is multiplied by each period's beginning (constantly declining) book value
<b>depreciable base</b>	Cost minus salvage value; the amount of cost that will be allocated to the service life
<b>double-declining balance depreciation</b>	An accelerated depreciation method by which a constant rate (that is 200% of the straight-line rate) is multiplied by each period's beginning (constantly declining) book value
<b>land improvements</b>	Includes the cost of parking lots, sidewalks, landscaping, irrigation systems, and similar expenditures that are incurred to better land
<b>lease/lessee and lessor</b>	Periodic payment from the user (lessee) of an asset to an owner (lessor) of the asset
<b>lump-sum purchase</b>	A single price paid for a package of assets; the purchase price must be allocated to each of the components
<b>materiality</b>	A matter of accounting judgment; when amounts involved are slight, expediency may dictate waiving the technically correct alternative in lieu of a simpler approach

<b>Modified Accelerated Cost Recovery</b>	A "depreciation" approach common to the tax code; generally permits more rapid "recovery" of asset cost than GAAP approaches; MACRS - pronounced "makers"
<b>operating lease</b>	A lease where the lessee makes periodic payments for periodic use of an asset, but does not assume the ultimate risks and rewards of owning the asset
<b>residual value</b>	Amount expected be realized at the end of an asset's service life; "salvage value"
<b>service life</b>	The period of time that a depreciable asset will be in use by an entity; the time interval over which the asset will be depreciated
<b>straight-line depreciation</b>	A simple depreciation method by which the depreciable base is spread uniformly over the service life
<b>sum-of-the-years'-digits method</b>	Accelerated depreciation method where the depreciable base is spread over the asset life, with each year's portion being a unique but declining fraction tied to the overall asset life
<b><u>units of output depreciation</u></b>	A depreciation approach where the depreciable base is allocated to the expected total units of output; mileage, hours, etc.

## CHAPTE TWO

### PAYROLL ACCOUNTING / ETHIOPIAN CASE/

#### **Aims & Objectives**

This chapter aims at discussing the accounting for payroll and payroll tax liabilities. The techniques and procedures used in computing personal income tax, pension contributions, and other deductions are discussed in detail. Also, the journal entries and other records necessary in accounting for payroll will be explained and illustrated based on examples. After reading and covered this unit you would be able to:

- ❖ understand the importance of payroll accounting
- ❖ define payroll related terms
- ❖ describe the components of a payroll register
- ❖ calculate income taxes, pension contribution and other deductions and net pay
- ❖ record journal entries related to payroll and payroll taxes
- ❖ prepare a payroll register

## **2.1 Introduction**

A business periodically pays employees for their services. The money paid for an employee's services is known as a salary. The period covered by a salary payment is called a pay period. Not all businesses base their salary payments on the same length of time. A pay period may be weekly, biweekly, semimonthly, or monthly. The same procedure is used for figuring a salary regardless of the length of the pay period. Various methods of recording payroll are used by different organizations.

The method used depends on the number of employees and the type of office equipment available. To facilitate the preparation of payroll, many business use automated data processing equipment. The basic accounting principles are the same regardless of whether manual or automated methods are used. In this topic, most of the accounting principles and procedures related the payroll systems in Ethiopia context will be discussed thoroughly.

## **2.2 Objectives of Payroll System**

Accounting for payroll is particularly important because:

1. payroll often represents the largest expenses that any organization incurs
2. To process data such as hours /days worked, pay rates, and payroll deductions so that the firm can:
  - ✓ Provide accurate & timely cash (pay checks)
  - ✓ Provide explanations of payroll data
  - ✓ protect payroll transactions against fraud
  - ✓ control wages & salary expenses
3. both Federal and State governments require that detailed payroll records be kept, and
4. Employees are sensitive to payroll errors or irregularities. To maintain good employee morale payroll must be paid timely and accurately.

### 2.3 Definition of Payroll Related Terms

**(a) Salary and Wages:** - The money paid by organizations to their employees for the services received from them are frequently referred to as a salary or wage.

#### **(b) Salary & Wages**

**Wages** - refers to payments for manual labor that is paid based on the number of hours worked or the number of units produced. Wages are usually paid when a particular piece of work is completed or for a period less than a month.

**Salaries:** - refers to compensations to employees on monthly or annual basis.

**(c) The pay period:** - The period of time covered by a wage or salary payment is called a pay period. Not all business bases their salary payments on the same length of time. A pay period may be weekly or monthly. Pay period for wages workers are usually made on weekly. Whereas, salaried employees pay periods are monthly.

**(d) The pay day:** - the day on which wages or salaries are paid to employees usually the last day of the pay period.

**(e) Payroll:** - The total amount paid to all employees for a pay period is called a payroll.

**(f) Payroll Tax:** - Are taxes levied against the employer on the payroll of a firm. A business is required by law to pay certain payroll taxes. All payroll taxes are based on employee's earnings.

**(g) Withholding Tax:** - are taxes levied against the earnings of employees of an organization and withheld by the employer per the regulations of the concerned government. Examples include income tax and pension contribution.

- (h) The Payroll Register (payroll sheet):** - A business form on which all payroll information is recorded is called a payroll register. A payroll register is a multi-columnar form used to organize the payroll data of an organization at the end of each pay period.
- (i) Employees earnings record:** - employees earnings record is a summary of employees' earnings, deductions, and net pay for each pay period. It is a separate record kept for each employee's earnings, deductions, and net pay for each pay period.
- (j) Payroll Deductions-** All the reductions from the Gross earnings of an employee such as withholding taxes, union dues, fines, credit association pay, etc.
- (k) Net pay:** - The amount that the employee takes home. The gross earnings after subtracting all the deductions. It is also known as take home pay.
- (l) Pay check:** An instrument for paying salary if the firm makes payment via writing a check in the name of each employee for the net pay or a check for the total net pay.
- (m) Employee Earnings Record:** is a summary of each employee's earnings, deductions, and net pay for each payroll period. It is a separate record kept for each employee. The individual employees' earnings record helps the employer organization to properly summarize and file tax returns.

## 2.4 Components of a Payroll Register

Each employee's number, name, sex and withholding allowances are listed in a payroll register. Each employee's earnings for a pay period are written in the appropriate column of a payroll register.

- i) **Employee number-** a number assigned to each employee for identification purpose. It can be a serial number or I.D. number.
- ii) **Name of employees-** each employees name should be listed in the appropriate column corresponding to each employee's number.
- iii) **Earnings-** money earned by an employee of an organization from various sources. Most commonly from basic salary, allowances, and overtime earnings

- (a) **The basic salary or regular salary**:- a flat monthly salary of an employee that is paid for carrying out the normal work of employment and subject to change when the employee is promoted.
- (b) **Allowances**: - money paid monthly to an employee for special reason which may include
- 1- **Position allowance**- a monthly sum paid to an employee for bearing a particular office responsibility, example, department head, or division head.
  - 2- **House allowance**- a monthly allowance given to cover housing costs of the individual employee when the employment contract requires the employer to provide housing but failed to do so.
  - 3- **Hardship allowance**- a sum of money given to an employee to compensate for an inconvenient circumstance caused by the employer. For instance, unexpected transfer to a different and distant work area or location. It is sometimes known as *disturbance allowance*.
  - 4- **Desert allowance**- a monthly allowance given to an employee because of assignment to a relatively hot region.
  - 5- **Transportation (fuel) allowance**- a monthly allowance to an employee to cover cost of transportation up to the work place if the employer has committed itself to provide transportation service.
- (c) **Overtime earnings**: overtime work is the work performed by an employee beyond the regular working hours or days. Overtime earnings are the amount payable to an employee for overtime work done.

In Ethiopia, in this respect, according to Article 33 of proclamation No. 64/1975 the following is discussed on about payment for overtime work.

1. A worker shall be entitled to be paid at a rate of one and one quarter ( $1\frac{1}{4}$  or 1.25) times this ordinary hourly rate for overtime work performed before 10 O'clock in the evening (10 P.M.)

2. A worker shall be paid at the rate of one and one half ( $1\frac{1}{2}$  or 1.5) times his ordinary hourly rate for overtime work performed between 10 O'clock in the evening (10 P.M.) and 6 O'clock in the morning (6 A.M.)
3. Overtime work performed on the weekly rest days shall be paid at a rate of two (2) times the ordinary hourly rate of payment.
4. A worker shall be paid at the rate of two and half ( $2\frac{1}{2}$  or 2.5) times the ordinary hourly rate for overtime work performed on a public holiday.

Hence the gross earnings of an employee may therefore, include the basic salary, allowance and overtime earnings (Gross earnings = basic salary + allowances + overtime).

*iv) Deductions.* The deductions section of a payroll register is used to record the various amounts deducted from employees earnings such as income taxes, pension contribution (provident fund contribution), contribution to trade union, contribution to Iddir etc. Deductions are either required by law or permitted by the employee himself. The principal deductions in Ethiopia are:

#### **I. Employee Income Tax**

This tax is paid on income earned from employment. Every person deriving income from employment is liable to pay tax on that income at the rate specified on schedule 'A' of proclamation No. 286/2002 article No. 11. Employers have an obligation to withhold the tax from each payment to an employee, and to pay to the tax authority the amount withheld during each calendar month. In applying the income tax rate to compute withholding taxes, income attributable to the month of Nehassie and Pagumen shall be aggregated and treated as the income of one month.

#### **Income tax rate**

According to proclamation No. 286/2002 article No. 11 the employment income tax rates of Ethiopia, as indicated in schedule A of the same proclamation are indicated below.

**Table1 Income Tax Rate**

Employment income (Per month)		Income tax Payable (%)
Over Birr	To Birr	
0	150	Exempt
150	650	10
650	1400	15
1400	2350	20
2350	3550	25
3550	5000	30
Over 5000		35

- ❖ Taxable employment income shall include any payment or gain in cash or in kind received from employment by an individual, including income from employment or otherwise from prospective employment.
- ❖ In computing a withholding tax, the income tax proclamation indicates that income attributable to the month of Nehassie and Pegument shall be aggregated (added) and treated as the income of one month.

**Short cut to Income Tax Calculation**

Employment Income		Income Tax Rate
Over Birr	To Birr	
0	150	
151	650	(10%XEI) – 15*
651	1400	(15% XEI) – 47.5*
1401	2350	(20% XEI) – 117.5
2351	3550	(25% XEI) - 235
3551	5000	(30% XEI) – 412.5
Over 5,000		(35% XEI) – 662.5

EI= Employment Income or taxable income

$$*15 = (150 \times 0.1) - 0$$

$$*47.5 = [(500 \times 0.15) - 0] + [(500 \times 0.15) - (500 \times 0.1) - (500 \times 0.1)]$$

Example Mr. earns a gross taxable earning of birr 700. The income tax equals to birr 57.5 birr  
[(15% X 700) – 47.5\*]

### **Income Exempted From Tax**

As indicated in the Ethiopian Council of Ministers income tax regulations No. 87/2002 the following categories of payments in cash or benefits in kind are excluded from computation of income taxable under schedule 'A' of proclamation No. 286/2002.

- ❖ Amount paid by employers to cover the actual cost of medical treatment of employees (medical allowance);
- ❖ Allowances in line of means of transportation granted to employees under the contract of employment;
- ❖ Hardship allowances;
- ❖ Amount paid to employees in reimbursement of traveling expenses included in duty;
- ❖ Amounts of traveling expense paid to employees recruited from elsewhere than the place of employment on joining and completion of employment or in case of foreigners traveling expenses from or to their country, provided that such payments are made pursuant to specific provisions of the contract;
- ❖ Allowances paid to members and secretaries of boards of public enterprises and public bodies as well as to members and secretaries of study groups set by the federal or regional government;
- ❖ Income of persons employed for domestic duties

### **II. Pension Contribution**

It is the amount of money that each government permanent employee contributes towards a fund, which up on the employees retirement, will be drawn up on to finance the participant's welfare. The contributions of pension funds are made only from the basic salary of the employee and contributions are made by only permanently employed worker i.e. workers employed on a contract basis do not contribute to the pension fund.

There are two types of such funds:

1. Public service civilian pension fund (4% from Employee and 6% Employer )
2. Public service military pension fund (4% from Employee and 16% Employer )

***Provident fund:*** - it refers to retirement plans of employees of private business organizations and other non-governmental organizations (NGOs). Provident fund is similar to pension fund. However, it is kept by the employer i.e., the employer serves as a trustee for its employees. The amount contributed by employees of private business or NGOs is called ***provident fund contribution***. The amount of contribution to the provident fund is determined as per the agreement of the employer and the employee. The amount contributed to provident fund varies from organization to organizations.

### **III. Other Deductions**

In addition to the above two kinds of deductions from employees earnings, employees may individually authorize deductions such as deductions to pay health or life insurance premiums, to pay loans from the employer or credit association to pay for donation or charitable organizations; etc.

Each of the major other deductions may be put in special column in the payroll register. The sum of all the above-mentioned deductions (income tax pension contribution, and other deductions) gives the total deduction from the gross earnings of an employee. The column “Total Deductions” shows the total deductions made from the earnings of employees in the payroll register.

### **IV. Net Pay**

This amount is held in one column of the payroll register representing the excess of gross earnings over the total deductions of an employee. The column net pay total shows the grand total amount that will be received by employees. It is called take home pay.

### **V. Signature**

The payroll sheet should have a column for the signature of employees. Every employee has to sign when she collects her net pay.

## **2.5 Major Procedures or Activities Involved In Accounting for Payroll**

1. Gathering the necessary data. All the relevant information about every employee should be gathered. This activity requires reviewing various documents and to do so some arithmetic work.
2. Including the names of employees along with the gathered data such as earnings, deductions, and net pays in the appropriate columns of the payroll register.
3. Totaling and proving the payroll register. It must be proved that the grand total earnings equal to the sum of the grand totals of deductions and net pays in the register.
4. The accuracy and authenticity of the information summarized in the payroll should be verified by different person from the one who compiles it.
5. The payroll is approved by the authorized personnel
6. Paying the payroll either in cash or issuing a check for every individual employee for the net amount payable to each employee.
7. Recording the payment of the payroll and recognition of the withholding tax liabilities.
8. Recording the payroll tax expense of the employer
9. Paying and recording withholding and payroll tax liabilities to the concerned authority in our case to the Inland Revenue Authority, on time.

## **2.6 Recording Payroll Related Transactions**

In labor intensive firms employees' salary and other payroll related expenses are of a significant amount. As a result, such expenses should properly be recorded.

1. Payment of Salary: At time of paying salary, a salary expenses account is debited by the amount of gross earning , cash is credited by the amount the net pay, and all payroll related liabilities (Such as Income tax payable and pension contribution payable) are credited by their respective amounts.

2. Payroll Tax Expense: The employers firm contribution 6% of its permanent employee's basic salary to the pension trust fund. So a payroll tax expense is debited and pension contribution payable is credited by this amount.
3. Payment of withholding and payroll taxes: all payroll taxes and withholding taxes are paid to the Inland Revenue Administration. At the time of payment, liabilities accounts are debited, and the cash account is credited.

### Illustration

Addis Tire factory, a public business organization, pays the salary of its employees according to the Ethiopian calendar month. The forth-coming data related to the month of Tir, 1995.

S.N	Name of Employee	Basic salary	Monthly allowance	OT hours worked	Duration of work
01	Abebe Kebede	3800	400	15	Up to 10 P.M.
02	Fatuma Ali	2500	200	12	6 hours up to 10 P.M. 6 hours on public holiday
03	G/Medihin Alemu	1600	_____	6	Weekly Rest days
04	Selamawit Teshome	900	100	_____	_____
05	Tesema Tollosa	400	100	20	15 hours on weekly rest days and 5 hours during public holidays

### Additional information

The management of the organization usually expects all workers to work 160 hours in a month and during the month of Tir 1995 all workers have done as expected. Besides, all workers of the organization are permanent employees except G/Medhin. 50% of the monthly allowance of Abebe and 100% of the monthly allowance of Selamawit is not taxable. Fatuma and Abebe agreed to contribute monthly of Birr 100 each for a charity organization (Hope enterprise).

**Instructions:**

Based on the above information

1. prepare a payroll register for the organization for the month of Tir 1995.
2. record the payment of salary as of Tir 30, 1995 using cash.
3. record the payroll tax expense for the month of Tir
4. record the payment of the claim of the Charitable organization that arose from Tir's payroll assuming that the payment was made on Yekatit 5, 1995
5. Assuming that the withholding taxes and payroll taxes of the month of Tir, 1995 have been paid on Yekatit 6, 1995, record the required journal entry.

**Answer to for the Illustration****1. Overtime earning(OT)**

OT = OT hours worked X (ordinary hourly rate X OT rate)

Ordinary hourly rate = basic salary/ required monthly working hours

Ordinary hourly rate for

Abebe =  $3800/160 = 23.75$

Fattuma  $2,500/160 = 15.6$

G/Medhin =  $1,600/160 = 10$

Selamawit =  $900/160 = 5.6$

Tesema =  $400/160 = 2.5$

**Overtime Earnings**

Abebe 15 hours X  $(23.75 \times 1.25) = 445.31$

Fatuma  $[6\text{hours} \times (15.6 \times 1.25)] + [6 \text{ hours} \times (2.5 \times 15.6)] = 351$

G/Medhin  $(6\text{hours} \times (10 \times 2)) = \text{Br. } 120$

Tesema  $[15 \text{ hours} \times (2.5 \times 2)] + [5 \text{ hours} \times (2.5 \times 2.5)] = 106.25$

### ***Gross earnings***

Gross earnings = Basic salary + Allowance + OT earnings

$$\text{Abebe} = 3800 + 400 + 445.31 = 4645.31$$

$$\text{Fatuma} = 2500 + 200 + 351 = 3051$$

$$\text{G/Medihin} = 1600 + 0 + 120 = 1720$$

$$\text{Selamawit} = 900 + 100 + 0 = 1000$$

$$\text{Tesema} = 400 + 100 + 106.25 = 606.25$$

### ***Deductions and net pay***

#### **1. Abebe**

Gross taxable income = Gross earnings – non taxable allowances

$$= 4645.31 - 200 \text{ (50\% of allowance)}$$

$$= 4445$$

### **Employees' income tax**

<u>Earnings</u>		<u>Income tax rate</u>	=	<u>Income tax</u>
150	X	0	=	0
500	X	10%	=	50
750	X	15%	=	112.5
950	X	20%	=	190
1200	X	25%	=	300
895	X	30%	=	268.5
4445				921

Using the short cut formula

$$\text{Income tax} = (30\% \times 4445) - 412.5 = 921$$

### ***Pension contribution***

Pension contribution in government owned organizations is 4% of Basic salary. Therefore;

$$4/100 \times 3800 = 152$$

### ***Other deductions***

Contribution to hope enterprise 100

$$\begin{aligned}
 \text{Total deductions of Abebe} &= \text{income tax} + \text{pension} + \text{others} \\
 &= 921 + 152 + 100 \\
 &= 1173
 \end{aligned}$$

$$\begin{aligned}
 \text{Net pay} &= \text{Gross earnings} - \text{total deductions} \\
 &= 4645 - 1173 \\
 &= 3472
 \end{aligned}$$

## 2. Fatuma

Gross taxable income = 3051

Earnings	Income tax rate	= Income tax
150	0	0
500	10 %	50
750	15%	112.5
950	20 %	190
<u>701</u>	25%	<u>175.25</u>
<u>3051</u>		<u>527.75</u>

Using the short cut formula

$$\text{Income tax} = (25\% \times 3051) - 235 = 527.75$$

### *Pension contribution*

$$\text{Basic salary} \times 4\% = 2,500 \times 4/100 = 100$$

### *Other deductions*

Contribution to hope enterprise = 100

$$\begin{aligned}
 \text{Total deductions of Fatuma} &= 527.75 + 100 + 100 \\
 &= 727.75
 \end{aligned}$$

### *Net pay*

$$\begin{aligned}
 \text{Net pay} &= \text{Gross earnings} - \text{total deductions} \\
 &= 3051 - 727.75 \\
 &= \underline{\underline{2,323.25}}
 \end{aligned}$$

### 3. G/Medihin

Gross taxable income = 1720

<u>Earnings</u>	<u>Income tax rate</u>	<u>= Income tax</u>
150	0	0
500	10 %	50
750	15 %	112.5
<u>320</u>	20 %	<u>64</u>
<u>1720</u>		<u>226.5</u>

Using the short cut formula **Income tax** = (20% X 1720) – 117.5 = 226.5

#### *Pension Contributions*

Pension is deducted from permanent employees only. Hence, the value of pension contribution for G/Medihin will be zero because he is not a permanent employee of the organization.

**Total deductions** of G/Medihin = 226.5

#### **Net pay**

Net pay = Gross earnings – total deductions  
= 1720 – 226.5  
= 1493.5

### 4. Selamawit

Gross taxable income = 1000 – 100 = 900

(The allowance of selamawit is tax-free)

<u>Earnings</u>		<u>Income tax rate</u>	<u>=</u>	<u>Income tax</u>
150	X	0	=	0
500	X	10 %	=	50
<u>250</u>	X	15%	=	<u>37.5</u>
<u>900</u>				<u>87.5</u>

Using the short cut formula  $\text{Income tax} = (15\% \times 900) - 47.5 = 87.5$

**Pension contribution**

Pension contribution = basic salary X 4%

$$= 900 \times 4/100 = 36$$

Total deductions =  $87.5 + 36 = 123.5$

**Net pay**

Net pay = Gross earnings – total deductions

$$= 1000 - 123.5$$

$$= 876.5$$

**5. Tesema**

Gross taxable income 606 birr

<u>Earnings</u>	<u>Income tax rate</u>	<u>= Income tax</u>
150	0	0
<u>456</u>	10%	<u>45.6</u>
<u>606</u>		<u>45.6</u>

Using the short cut formula  $\text{Income tax} = (10\% \times 606) - 15 = 45.6$

**Pension contribution**

Pension contribution = 4% of basic salary

$$= 400 \times 4/100 = 16$$

Total deduction =  $45.6 + 16 = 61.6$

**Net pay**

Net pay = Gross earnings – total deductions

$$= 606 - 61.6 = \underline{544}$$

**Addis Tire Factory**  
**Payroll Register**  
**For the Month Ended, Tir 30,1995**

S. N	Name of employee	Earnings			Gross Earnings	Deductions			Total Deduction	Net Pay
		Basic salary	Allow ance.	OT Earning		Income Tax	Pension	Others		
01	Abebe Kebede	3,800	400	445	4,645	921	152	100	1,173	3,472
02	Fatuma Ali	2,500	200	351	3,051	527.75	100	100	727.75	2,323.25
03	G/Meidihin	1,600	—	120	1,720	226.5	—	—	226.5	1,493.5
04	Selamawit	900	100	—	1,000	87.5	36	—	123.5	876.5
05	Teshome	400	100	106	606	45.6	16	—	61.6	544.4
06	Tesema Tollosa									
	<b>Grand total</b>	<b>9,200</b>	<b>800</b>	<b>1,022</b>	<b>11,022</b>	<b>1,808.35</b>	<b>304</b>	<b>200</b>	<b>2,312.35</b>	<b>8,709.65</b>

Prepared by \_\_\_\_\_ Checked by \_\_\_\_\_ Approved by \_\_\_\_\_

## 2. Recording the payment of salary on Tir 30, 1995

Tir 30	Salary expense-----	11, 022
1995	Cash-----	8709.65
	Income tax payable-----	1808.35
	Pension payable-----	304
	Payable to hope enterprise-----	200

### N.B

- The amount of cash paid to the employee is equal to the net pay amount on the payroll register.
- Salary expense is equal to the gross earnings of the employees on the payroll register, which is also equal to the sum of total deductions and net pay.
- Recording payroll tax expense

In Ethiopian case all government organizations are required by law to contribute 6% of the basic salary of each permanent employee to the pension fund. This means that the total pension contribution is 10% of the basic salary of permanent employees of which 4% is contributed by the employees and the remaining 6% is contributed by the employer organization. Therefore, the payroll tax expense of Addis Tire Factory will be:

$$\begin{aligned}
 &\text{Basic salary of permanent employees X 6\%} \\
 &= (3,800 + 2,500 + 900 + 400) \times 6/100 \\
 &= 7600 \times 6/100 \\
 &= 456
 \end{aligned}$$

The journal entry to record the payroll tax expense will be

Tir 30	payroll tax expense-----	456
1995	pension payable-----	456

(4) To record the payment of cash to hope enterprise

Yekatit 5,	Payable to hope enterprise-----	200
1995	Cash-----	200

(5) Payment of withholding and payroll tax on Yekatit 6, 1995.

The balance of income tax payable = 1808.35

The balance of pension payable (300 + 450) = 760

Total liability to be paid to Inland Revenue 2568.35

The journal entry to record the payment of withholding taxes and payroll tax will be

Yekatit 6, 1995	income tax payable-----	1808.35
	Pension payable-----	760
	Cash-----	2568.35

## Chapter review

The term payroll is used to refer to the total amount paid to employees for a certain period. Payroll includes amounts paid for salaries to managerial or administrative employees as well as wages paid for manual labor.

Accounting systems for payroll and payroll taxes are concerned with the records and reports associated with the employer-employee relationship. It is important that the accounting system provide safeguards to ensure that payments are accord with management's general plans and its specific authorizations.

Various federal, state, and local laws require employers to keep accurate payroll records and to prepare reports and submit to the appropriate governmental units. The law also requires employees and for taxes imposed on itself. These record must be kept for specified periods of time and be available for inspection by those responsible for enforcement of the laws.

Payroll data may also be useful in negotiations with labor unions, in settling employee grievances, and in determining rights to vacations , sick leaves, and retirement pensions.

Salary and wages are usually used interchangeably. However, the term wage is more correctly used to refer to payments to unskilled manual labor. It is usually paid based on the number of hours worked or the number of units produced. Therefore, wages are usually paid when a particular piece of work is completed or on a weekly basis. On the other hand, salaries refer to payments to employees who render managerial, administrative, or similar services. Salaries are usually paid to skilled labor on a monthly or yearly basis.

A payroll register is the list of employees of a business along with each employee's gross earnings, deductions, and net pay (take-home-pay) for a particular pay period. The

payroll register (sheet) is prepared based on attendance sheets, punched (clock) cards or time cards.

Components of a payroll register include Employee number, Employee name, Earnings (usually Basic or regular salary, Allowances, and overtime), Deductions, Net pay, and Signature.

Earnings are money earned by an employee of an organization from various sources. It may include: (1) the basic salary which is a flat monthly salary of an employee that is paid for carrying out the normal work or employment, (2) allowances which represents money paid monthly to an employee for special reasons, which may include: position allowance, housing allowance, hardship allowance, desert allowance, and transportation (or fuel) allowance, etc, and (3) overtime earnings – the amount payable to employees for overtime work performed.

Deductions are subtractions made from the earnings of employees. Deductions are either required by law or permitted by the employee himself. The principal deductions in Ethiopia are: Employee Income tax, pension contribution, and other deductions like deductions to pay life insurance premiums, to repay loans from the employer, for credit association, to pay for donation to charitable organization, contribution to 'Idir', etc.

Net pay or take-home-pay represents the excess of gross earnings over total deductions of an employee.

The payroll sheet should have a column for signature of the employee to be taken when the employee collects the net pay. In general, a payroll register (sheet) should at least show the total earnings of each employee, deductions, and the net pay together with the names and signatures of employees.

## Glossary

**Deductions:** various amounts deducted from employee's earnings. Example includes.  
Income tax, pension, and others

**Employees' Earnings Record:** a summary of each employee's earnings, deductions and net pay for each pay period.

**Gross Earnings:** total amount of money earned by an employee from various sources. Example includes basic salary, allowance, and overtime.

**Net Pay: (also called take home pay):** The amount of cash paid to employee after deducting the total deductions from gross earnings.

**Payroll Day:** the day on which wages or salaries are paid to employees.

**Payroll:** the total amount paid to employees for a payday.

**Payroll tax:** taxes based on the payroll of a business.

**Salary:** payment for managerial, administrative or similar service employees.

**Wage:** payment for manual laborers.

**Withholding tax:** the amount of money deducted from the earnings of employees and withheld by the employer on the behalf of other parties.



## Part II: Discussion Questions

1. Describe the objectives of payroll system?
2. Identify and briefly describe the components of payroll register?
3. What does payroll tax mean? What is the difference between withholding tax and payroll tax?
4. What is the main difference between pension contribution and provident fund contribution?
5. What are the main activities and procedures involved in accounting for payroll? Explain.

### Problem – 1

A permanent employee of a governmental organization with a basic monthly salary of Birr 640 and monthly allowance of Birr 100 has worked 20 overtime hours during days in the weekends of the current month. This employee usually works 160 hours in a month to earn his basic salary.

Required: Based on the above information calculate

- ❖ The ordinary hourly rate of the employee
- ❖ The Gross earning of the employee
- ❖ The amount of employee income tax and pension contribution deductions.

### Problem – 2

PAN-AFRICA trading, a private owned business pays its employees salaries according to the Ethiopian calendar month. The following data relate to the month of Meskerem 1995.

S.N	Name of employee	Basic salary
01	Shewit. S.	Br. 2.920
02	Abraham. N.	800
03	Chala. T.	1,120

### **Additional information**

- All workers are expected to work 40 hours per week (160 hours a month). The workers have done as they are expected.
- Abraham N. has worked 8 hours of overtime during Meskerem: 4 hours during Ethiopian Meskel and the other 4 hours before 10 p.m
- Shewit. S. has also worked 10 hours of overtime: 5 hours during weekly rest days and 5 hours between 10pm – 6 am
- Shewit and Chala received a month allowances of Br. 400 and 200 respectively, which are both non-taxable.
- Chala agreed to contribute Br. 150 monthly to the credit association of the company.
- The company has a policy of contributing 15% of basic salary to a provident fund of which 5% is contributed by the employees and the other 10% is contributed by the employer (PAN-Africa trading)
- All workers are permanent except Abraham N.

### **Instructions**

1. Determine the net pay for:  
(a) Shewit S.      (b) Abraham N      (c) Chala T.
2. Calculate the total  
(a) Withholding taxes expense      (b) Payroll taxes expense
3. Record the payment of salary as of Meskerem 30, 1995
4. Record the payment of the claim of the credit association of the company as of Tikimit 4, 1995
5. Record the payment of income tax payable to the Inland Revenue Administration as of Tikimit 5, 1995.

### Problem – 3

Paradise Lodge is a private lodge located in Arba Minch Town. The Lodge Company pays the salary of its employees according to the Ethiopian calendar month. The following data relates to the month of Megabit, 2000.

<u>Serial No.</u>	<u>Name</u>	<u>Basic Salary</u>
AMU 101	Abeje Beye	br. 2710
AMU 102	Haragua Debebe	2500
AMU 103	Zelege Zelelew	1800
AMU 104	Zinash Mandefron	4200

#### Additional information

- ❖ The organization expects every worker to work 48 hours in a week and during Hidar there are four weeks and all workers have done as they have been expected.
- ❖ Ato, Abeje and W/r, Haregua are entitled to get a monthly allowance of birr 500 and br. 400 respectively.
- ❖ All workers are permanent except W/t, Zinash, and they are entitled to a total of 15% provident fund of which 10% from the employer and 5% from the employee.
- ❖ Ato Zelege and W/t Zinash have worked 12 hours of overtime each on public holidays.
- ❖ According to the company rule, any allowance more than birr 200 is subject to income tax.

**Required:** based on the information given above:

1. Compute the income tax for each employee.
2. Compute the total deductions for each employee.
3. Determine the net pay (take-home-pay) for each employee.
4. Compute the total withholding tax for the month.
5. Compute the total payroll tax expense.
6. Pass the journal entry to record the payment of salary as of Megabit 30, 2000.

#### Problem 4

Arba Minch University pays salary to its employees in Ethiopian calendar month. The university has temporary and permanent employees. The following data relates to the month of Yekatit, 2000 E.C.

No.	Name of Employee	Salary	Allowance	worked(hr)	OT Work
01	Sindu Shewaye	Br. 730	200	4	6:00-10:00p.m.
02	Sisay Eshetu	1020	-	8	Sunday (8:30-5:30)
03	Tensay Alebachew	5300	-	-	-
04	Taye Muluken	1470	-	-	-
05	Tefefe Ejeta	950	-	6	Public Holiday

#### Additional Information

- The normal work hours per week are 40.
- There were no absentees during the month.
- All employees are permanent except Taye and Tefefe
- Sisay agreed to contribute Br. 300 per month as a saving in the credit Association of the agency

#### Required

1. Prepare a payroll register (sheet) for the month
2. Record the payment of salary as a Yeakatit 30, 2000 E.C .
3. Record the payment of the claim of the credit Association of the agency on Megabit 1,2000 E.C..
4. Record the payment of withholding taxes and pension contribution to the concerned government body on Megabit 7,2000 E.C.

## CHAPTER THREE

### ACCOUNTING FOR PARTNERSHIPS

#### Aims and Learning Objectives

The unit aims at discussing the accounting for partnerships such as recording investments, computing each partner's share of income or losses using different techniques, and recording them to the respective capital accounts. Also, the accounting implications of dissolution and liquidation of a partnership will be described.

Dear Students, having studied and worked through this chapter you would be able to:

- Define partnerships and identify their characteristics.
- Explain the advantages and disadvantages of a partnership form of business
- Record partners' investments of cash and other assets when a partnership is formed
- Compute and record the income or losses that partners share by applying various income or loss sharing method.
- Prepare financial statements for a partnership
- Record a person's admission to a partnership
- Record a person's withdrawal from a partnership
- compute the distribution of assets to partners when they liquidate their partnership

### 3.1 Introduction

In your principles of Accounting I course, you have studied the three most dominant forms of business organization: sole proprietorship, partnership, and corporation. For accounting purposes, each form should be viewed as an economic unit separate from its owners, though legally only the corporation is considered separate from its owners. In the previous section you have also studied the basic accounting principles and practices used in accounting for a sole proprietorship form of business organization. The accounting for corporate form of businesses will be explained in the next unit. Therefore, the main focus of this chapter is to acquaint the learners with the basics of accounting for partnerships. As will be explained later in this section, the same accounting principles that are used in accounting for a sole proprietorship are applied in partnership form of businesses. However, there are accounting practices that are unique to partnerships. These unique accounting features relate to the partners' capital and drawing accounts, division of income (or loss), and changes in ownership of the partnership.

### 3.2 Meaning and Characteristics of Partnerships

The Uniform Partnership Act, which has been adopted by most states, defines a **partnership** as "an association of two or more persons to carry-on as co-owners of a business for profit. This association is based on a partnership agreement or contract known as the *articles of a partnership*. The partnership agreement should specify the name, location, and purpose of the business; the capital contributions and duties of each partner; the methods of income and loss division; the rights of each partner upon liquidation (winding up) of a partnership, etc.

The partnership agreement should be in writing to avoid any misunderstandings about the formation, operation, and liquidation of a partnership. Partnerships are treated as separate economic entities in accounting. However, they are not separate legal entities like a corporation. They differ in many ways from other forms of corporation.

### **3.3. Characteristics of a partnership**

The next few paragraphs describe some of the important characteristics of a partnership.

#### **A) Voluntary Association**

A partnership is a voluntary association of individuals rather than a legal entity in itself. Therefore, a partner is responsible under the law for his or her partner's business actions within the scope of the partnership. A partner also has unlimited liability for the debts of the partnership. Because of these potential liabilities, an individual must be allowed to choose the people who join the partnership. A person should select as partners individuals who share his or business objectives.

#### **B) Partnership Agreement**

A partnership is easy to form. Two or more competent people may simply agree to be partners in a common business purpose. Their agreement is called a partnership agreement. The partnership agreement does not have to be in writing; however, good business practice calls for a written document that clearly states the details of the arrangement.

#### **C) Limited Life**

Because a partnership is formed by the consent of two or more partners, it has a limited life. This means that, anything that ends the contract dissolves the partnership.

A partnership can be dissolved when (1) a new partner is admitted; (2) a partner withdraws, retires ;(3) a partner goes bankrupt, (4) a partner is incapacitated; (5) a partner retires;( 7) a partner dies or (8) the partnership ends according to the partnership agreement( for example, when a large project is completed). At this point, the remaining partners should sign a new contractual agreement to continue the affairs of the business. In place of the old partnership a new partnership is formed. Thus, a partnership is said to have a limited life.

#### ***D) Unlimited Liability***

Each partner is liable for all the debts of the partnership. When and if the partnership fails to pay its debts, creditors can seize (take) each partner's personal assets to satisfy their claims. Therefore, partnership creditors' claims are not limited to the assets of the business, but extends to the personal property of the partners. Each partner, then, could be required by law to pay all the obligations (debts) of the partnership.

Suppose, for example, the liabilities of GYB company (a partnership business) as of a certain date is birr 800,000, however, the total properties (assets) of GYB company could only be sold for birr 550,000. Thus, to settle creditor's claims fully, the house or personal assets of the partners may have to be sold to substantiate for the deficit of birr 250,000.

#### ***D) Mutual Agency***

Each partner is an agent of the partnership within the scope of the business. This means that partner's act to any contract is binding on the remaining partners as long as it is within the apparent scope of the business' operations.

For example, a partner in a used –car can bind the partnership through the purchase or sale of used cars. But this partner cannot bind the partnership to a contract to buy men's clothing or any other goods that are not related to the used car business. Because of mutual agency, it is very important or an individual to choose business partners who have integrity and who share his or her business objectives.

#### ***E) Co ownership of partnership property***

Once invested, the properties contributed by the partners become the property of the partnership and is owned jointly by all the partners. Hence, individuals invest property in a partnership give up the right to their separate use of the property. Upon liquidation of the partnership and distribution of assets, the partner's claim on the assets is measured by the amount of the balance in his/her capital account.

## **F) Participation in Partnership Income**

Each partner has the right to share in the company's income and the responsibility to share in its losses. The partnership agreement should state the method of distributing income and losses to each partner.

### **3.4 Advantages and Disadvantages of Partnership**

#### **Advantages:**

A partnership form of business ownership has the following advantages:

1. Easy and inexpensive to form, change and dissolve than a corporation. A partnership is easy to form. It only requires the consent of two or more parties. Two or more competent persons simply agree to be partners in some common business purpose.
2. A partnership facilitates the pooling of capital resources and managerial skill (talent) than a sole proprietorship. Because a partnership is formed by two or more persons, it is possible to raise a large amount of capital and managerial skill than a single owner.
3. Not subject to separate taxation as a case in a corporation because a partnership is not a legal entity for tax purposes, it does not have to pay federal income tax, as do corporations. But each partner reports his/her own share of partnership income and is individually taxed, and
4. Not required to observe on many restrictive laws unlike a corporation.
5. A partnership gives the partners a certain amount of freedom and flexibility.

## **Disadvantages**

Partnership has the following disadvantages:

1. Partners assume unlimited personal liability. Each partner is individually liable to creditors for debts incurred by the partnership. That is, the liability of the partners is not limited to what they have in the partnership, but it goes to the extent of their personal properties (assets).
2. Each partner does not exercise his/her good judgment because one partner's act can bind a partnership into a contract.
3. Limited life. Partnerships are subject to possible termination/dissolution due to many uncontrollable circumstances such as the withdrawal, bankruptcy, incapacity or death of a partner.
4. The transfer of ownership from one partner to another person is difficult without the consent of all partners.

## **Choosing between Partnership and Corporation**

One of the most important considerations in choosing between a partnership and the corporate form of the business organizations is the income tax status of the business and of its owners.

A partnership pays no income tax but is required to file an information return showing its revenue and expenses, the amount of its net income, and the division of the net income among the partners. The partners include their respective shares of the Ordinary net income from the partnership and such items as dividends, capital gains and losses, and charitable contributions on their individual income tax returns, regardless of whether they received more or less than this amount of cash from the partnership during the year.

The corporation is a separate legal entity subject to a corporate income tax. The net income, when and if distributed to stockholders in the form of dividends, is also taxable income to stockholders. Certain corporations with not more than ten stockholders can elect not to be taxed as corporations, provided their income or loss is fully assumed by their stockholders. These “tax-options corporations” file information returns as do partnerships, and their stockholders report on individual tax returns their respective shares of the year’s profit or loss.

Income tax rates and regulations are subject to frequent change, and new interpretations of the rules often arise. The tax status of the owners is also likely to change from year to year. For all these reasons, management should regularly review the tax implications of the partnership and corporate forms of organizations that the business entity may adapt most successfully to the tax environment.

The burden of taxation is not the only factor in making a choice between the partnership and the corporate form of organization. Perhaps the factor which most often tips of scales in favor of incorporation is the opportunity for obtaining larger amount of capital when ownership can be divide into shares of stock, readily transferable, and offering the advantages inherent in the separation of ownership and management.

### **3.5 Types of Partnerships**

- A. Limited partnership:**-is a special type of partnership that, like, a corporation, confines the limited partner’s potential loss to the amount of his or her investment. Under this type of partnership the unlimited liability disadvantage of a partnership can be overcome.
- B. General partnership:** - each partner is individually liable to creditors for debts incurred by the partnership. Thus, if a partnership becomes insolvent, the partners must contribute sufficient personal assets to settle the debts of the partnership.

**★ Quick Check - 3.1**

- 1. Define the terms; partnerships, articles of a partnership, Limited partnership and General partnership*
- 2. List down the Characteristics of a partnership*
- 3. What are the advantages and disadvantages of a partnership*

**3.6 Accounting for Partnership**

**Recording the Formation of a Partnership**

A separate capital account is maintained for each partner in a partnership. Each partner's capital account is credited for the value of their investment upon formation of the partnership. In partnership a separate owner's equity (capital ) and drawing accounts are maintained for each partner In the partner's equity section of the balance beet the balance of each partner's capital account is listed separately Each partner invests cash or other assets or a combination of the two in the partnership according to the partnership agreement.

Formation by contribution of cash

Cash.....	xx
A capital.....	xx
B capital.....	xx

Formation by contribution of non cash assets and cash

Cash.....	xx
Non cash assets.....	xx
A capital .....	xx
B capital.....	xx

Non cash assets are debited for an amount the partners agreed up on as the value of the non cash assets contributed Credit liability account if any for liability the partnership assumes. Credit each partners account for his or her respective contribution

***Illustration***

Assume that TG and HT decided to form Millennium Business College Partnership at Arba Minch Town which would provide Education services. They had been in Stationary and Cafeteria businesses, respectively, before they decided to form the partnership. The partnership assumed the liabilities of their separate business. The assets were valued and recorded at their current fair market value.

Shown below are the assets contributed and the liabilities assumed by the partnership at their historical cost and fair market value.

	<b><i>TG</i></b>		<b><i>HT</i></b>	
	<b><i>Cost</i></b>	<b><i>Market value</i></b>	<b><i>Cost</i></b>	<b><i>Market value</i></b>
Cash	Birr 188,500	188,500	Birr 160,400	160,400
Accounts Receivable	5,400	5,400	3,700	3,700
Supplies	8,000	8,000	6,500	6,500
Equipment	23,000	12,000	18,000	10,000
Furniture	14,300	7,000	21,000	11,000
Accounts Payable	(2,300)	(2,300)	-	
Notes payable	-		(3,800)	(3,800)

The journal entry on January 1, 2007 to record the investment of each partner and the formation of the partnership would be:

2008, Jan.1. Cash	188,500	
A/R	5,400	
Supplies	8,000	
Equipment	12,000	
Furniture	7,000	
		Account Payable 2,300
		TG, Capital 218,600

2008, Jan.1. Cash	160,400	
A/R	3,700	
Supplies	6,500	
Equipment	10,000	
Furniture	11,000	
		Notes Payable 3,800
		HT, Capital 187,800

### **Recording Additional Investment and Withdrawal**

During the period of operations partner(s) may additionally invest to increase their capital account or withdraw their capital expecting earnings from their business. What ever the case additional investment of cash or non cash asset is debited to asset account and credited to partner's capital account ,and withdrawal of capital is debited to capital and credited to cash account.

### Example for additional investments by partners

On June 1, 2007 TG and HT in example above invested Birr5, 000 and Birr 7,000 cash in the partnership respectively

**Required;** Record the additional investments by the partners

June 1, 2007	Cash	12000	
		TG capital	5000
		HT capital	7000

### Example for withdrawal by partners

On March31 and April 30, 2007 TG and HT in example above withdrew \$ 3,500 and 1,500 cash respectively. (Assume that the withdrawal is made from their original investments)

**Required;** Record the withdrawals by the partners

	TG capital	3500	
	HT capital	1500	
		Cash	5000

## 3.7 Division of Partnership Income and Losses

A partnership's income and losses can be distributed according to whatever method the partners specify in the partnership agreement. The agreement should be specific and clear, to avoid later disputes.

- ✓ If a partnership agreement does not mention the distribution of income and losses, the law requires that they be shared equally by all partners.
- ✓ If a partnership agreement specifies only the distribution of income, but is silent as to losses, the law requires that losses be distributed in the same ratio as income.

✓ In deciding the income sharing ratio Partners take in to consideration the following factors.

- Amount of investment
- Ability, talent , skill etc
- Time devoted or service contribution etc

✓ The Income of a partnership normally has three components:

- (1) Return to the partners for the use of their capital – called interest on partners' capital,
- (2) Compensation for direct services the partners have rendered – called partners' salaries, and
- (3) Other income for any special characteristics individual partners may bring to the partnership or risks they may take.

The breakdown of total income into its three components helps clarify how much each partner has contributed to the firm.

Income /loss can be shared among the partners in one of the following ways:

1. Net income /loss divided in a stated ratio such as:
  - A) equally
  - B) agreed upon ratio (other than equally)
  - C) ratio based on beginning capital balances, ending capital balances, or average capital balances
2. Net Income/loss divided by allowing interest on the capital investments, salaries, or both with the remaining net income divided in an agreed ratio.

***Example***

Assume that Millennium Business College Partnership had a net income of Birr 120,000 in its first year of operation (December 31, 2007)

A. Assume that the articles of a partnership provides equal share of Net Income or Loss

- In this case the capital accounts of each partner will be credited for Birr. 60,000

Income Summary-----	120,000
TG capital-----	60,000
HT capital-----	60,000

B. Net income is divided in ratio of 2:3 to TG and HT respectively.

Income summary-----	120,000
TG capital (2/5 X 120,000) -----	45,000
HT capital (3/5 X 60,000) -----	75,000

C. Net income is divided in a ratio of partners' capital account balances at the beginning of the fiscal period.

Income summary ----- 120,000

TG capital	$\left[ \frac{218600}{406400} \times 120,000 \right]$	-----64547
HT capital	$\left[ \frac{187800}{406400} \times 120,000 \right]$	----- 55453

D. Net income is divided by allowing 10% interest on their beginning capital balances, annual salary of Birr 10,000 to TG and the remainder is to be divided equally.

***Net Income Division***

	<u><b>TG</b></u>	<u><b>HT</b></u>	<u><b>Total</b></u>	<b>Income to be <u>Distributed</u></b>
Net income	-	-	-	Birr, 120,000
Interest (10%)	21860	18780	40640	79360
Salary	10,000	--	10,000	69360
Remainder	<u>34680</u>	<u>34680</u>	<u>69360</u>	-- 0 –
Distribution	<u>66540</u>	<u>53460</u>	<u>120,000</u>	

***Journal entry***

Income summary ----- 120,000  
                   TG capital ----- 66540  
                   HT capital ----- 53460

★ Quick Check – 3.2

Assume that MBC partnership incurred net loss of Birr 60,000 instead of net income for the same year ended.

**Required;** Determine the amount to be distributed to each partner and record the distribution in journal entry form based on agreements A through D above.

**3.8 Financial Statements for a Partnership**

Since a partnership is similar to a single proprietorship, the accounting and financial reporting for these forms of organization are basically the same. As shown above, a partnership has several capital accounts, and any income or losses must be distributed to these accounts. This section details the preparation of financial statements for a partnership.

## Partnership Income Statement

A partnership income statement may differ slightly from that of a single proprietorship. Because partners are co-owners of the business, the income statement may contain a schedule showing the distribution of the period's net income or net loss to each partner. The following illustration shows this feature for MBC partnership .

### MBC partnership

#### Income Statement

For year ended December 31, 2007

Fees earned	Birr 400, 000
Less: Operating Expenses	<u>300,000</u>
<b>Net Operating Income</b>	Birr 100,000
Add: Non operating revenue: Interest received	<u>20,000</u>
<b>Net Income</b>	<u>Birr 120,000</u>

Distribution of Net Income between the Partners TG and HT by allowing 10% interest to their original investment, 10,000 birr annual salary to partner TG and the remainder to be shared equally is as follows

	<b>Partner TG</b>	<b>Partner HT</b>	<b>Total</b>
Interest on Capital (10%)	Br.21860	Br. 18780	Br. 40640
Partner's Salary	10,000	-	10,000
Remainder Income Equally	<u>34680</u>	<u>34680</u>	<u>69360</u>
Net Income	<u>66540</u>	<u>53460</u>	<u>120,000</u>

## Statement of Partner's Capital

Partners generally want a complete explanation of the changes in their capital accounts each year. To meet this need, a Statement of Partners' Capitals is prepared as a basic financial statement.

### Illustration

The statement of **partners' Capital** for TG and HT using the above mentioned data and assuming the income earned is shared equally is depicted below.

**MBC Partnership**  
**Statement of partners' Capital**  
**For the year ended Dec, 31, 2007**

	<u><b>TG</b></u>	<u><b>HT</b></u>
Capital Bal. January 1, 2002	Br. 218,600	Br. 187,800
<b>Add:</b> Additional investment	<u>5000</u>	<u>7000</u>
Total	Br. 223,600	Br. 194,800
Net income distribution	<u>60,000</u>	<u>60,000</u>
	283,600	254,800
<b>Deduct:</b> Withdrawals during the year	<u>3500</u>	<u>1500</u>
Capital Bal. Dec. 31, 2007	<b>Br. <u>280,100</u></b>	<b>Br. <u>253,300</u></b>

### Partnership Balance Sheet

The only distinctive feature of a partnership balance sheet is the presentation of the capital accounts in the owners' equity section as shown in the following illustration. Instead of a single capital account, the owners' equity section contains a separate capital account for each partner. However, if a partnership has many partners, the balance sheet may show only a single item and amount called Partners' Capital. Then, each partner's name and capital balance would be reported in a supporting schedule.

**MBC partnership**  
**Balance Sheet**  
**As on December 31, 2007**

<b>Assets</b>	<b>Amount</b>	<b>Liabilities and Owner's Equity</b>	<b>Amount</b>
Cash	xxx	Liabilities:	
Accounts Receivables	xxx	Accounts Payables	xxx
Merchandise Inventory	xxx	Notes Payables	xxx
Land and Other fixed assets	xxx	Other long term liabilities	xxx
		<b>Owners' Equity:</b>	
		TG's capital	<u>66540</u>
		HT's Capital	<u>53460</u> <u>120,000</u>
Total Assets	<u>xxx</u>	Total Liabilities and Owners Equity	<u>xxx</u>

**Quick check – 3.3**

1. Bontu and Roba agreed to form a partnership. Bontu contributed Br. 100,000 in cash, and Roba contributed non cash assets with a fair market value of Br. 200,000. At the end of its first year of operation the partnership earned net income of birr 30,000

**Required;** Prepare the journal entry to distribute the first year's income to the partners under each of the following independent cases.

- A. 1:1 (equally) to Bontu and Roba.
- B. 2:3 to Bontu and Roba. respectively
- C. Both partners agreed to share income and losses in the ratio of their original investments.
- D. Both partners agreed to share income and losses by allowing 10 percent interest on their original investments, 5,000 annual salaries to partner Bontu and sharing any remainder equally

2. What accounts are debited and credited to record the division of net income at the end of the fiscal period?

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3. What accounts are debited and credited to record the division of net loss among the partners' at the end of the fiscal period?

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### **3.9 Dissolution of a Partnership**

#### **Definition**

- Partnership dissolution refers to change in the original members of the partnership due to withdrawal, bankruptcy, retirement or death of an existing partner or admission of a new partner
- Dissolution occurs whenever there is a change in the original association of partners.
- When a partnership is dissolved, the partners lose their authority to continue the business as a going concern. This does not mean that the business operation necessarily is ended or interrupted, but it does mean – from a legal and accounting standpoint – that the separate entity stops to exist.
- The remaining partners can act for the partnership in finishing the affairs of the business or in forming a new partnership that will be a new accounting entity.
- A partnership is legally dissolved (terminated) when a new partner is admitted or an existing partner withdraws.

### 3.9.1. Admission of a New Partner:

The admission of a new partner dissolves the old partnership because a new association has been formed.

Dissolving the old partnership and creating a new one require the consent of all the old partners and the ratification of a new partnership agreement.

When a new partner is admitted, a new partnership agreement should be prepared.

One of the most prevalent changes in the make up of a partnership is the admission of a new partner. An individual can gain admittance to a partnership in one of two ways:

(1) Through the “Purchase of all or part of the interest of one or more of the existing partners”.

(2) Through the “Investment of Assets in the firm by the new partner”, with a resultant increase in the net assets of the partnership.

#### **1. Admission through Purchase of all or part of the interest of one or more of the existing partners (Acquisition of an interest by payment to One or More Partners)**

If a new partner acquires an interest from one or more of the existing partners, the event is recorded by establishing a capital account for the new partner and decreasing the capital account balances of the selling partners by the same amount. No assets are received by the partnership; the transfer of ownership is a private transaction between two or more partners.

Journal Entries:

(A) If new partner purchased interest from one existing (old) partner.

Old Partner Capital	A/C	Dr
	New Partner's Capital	A/C

(B) If new partner purchased interest from more than one existing partners:

Old Partners Capital A/C	Dr
New Partner's Capital A/C	Cr

**NOTE:** The entry records the book value of the equity, not the amount new partner pays.

**Illustration**

Jerry Adcock and Rose Villa are partners in Adcock and Villa. Jerry Adcock decides to sell his interest, assumed to be \$70,000 to Richard Davis for \$100,000 on August 13, 2003 and that Rose Villa agrees to the sale. Record the entry of sale of interest on the partnership books.

**Journal entry**

Adcock's capital -----	70,000
Villa's capital -----	70,000

**N.B.** The price that Rose Villa paid to Jerry Adcock can be more or less than Br. 70,000 but that is irrelevant as it wouldn't be reflected in the record (books) of the partnership.

**2. Admission through Investment of Assets in the firm by the New Partner (Investment in Partnership by New Partner)**

A new partner may gain admission by investing assets in the limited liability partnership, thus increasing its total assets and partners' capital. The incoming partner may invest an amount equal to, or more than, or less than the carrying amount of the ownership interest she/he acquires. If the new partner pays a price more or less than the ownership interest or he acquires an ownership interest less or more than the amount he invest, the situation leads to the recognition of Bonus or Goodwill. There are three basic methods of handling a new partners' investment.

- a) **A Simple Investment Plan.**
- b) **The Bonus Plan.**
- c) **The Goodwill Plan.**

For above three methods, the following basic steps are to be followed.

**Step – 1:** Find out Old Partnership Capital

**Step – 2:** Find out New Partnership Capital

Old Partnership Capital xxx

**ADD: New Partner’s Actual Investment Amount (b)** xxx

New Partnership Capital xxx

**Step – 3:** Find out **New Partner’s Interest (a)** in the New Partnership (New Partner’s Share in New Partnership Capital)

**Step – 4:** Compare New Partner’s Interest **(a)** with the New Partner’s Investment **(b)**

[Compare figures **(a)** with **(b)**]

<b>Simple Investment Method</b>	<b>If (a) = (b)</b>	Cash A/C  New Partner Capital A/C
(Difference between a & b is called Bonus)	<b><u>If (a) &lt; (b):</u></b>  Bonus to the old partners in the profit sharing ratio.	Cash A/C  New Partner Capital A/C  Old Partners Capital A/C
	<b><u>If (a) &gt; (b)</u></b>  Bonus to the New Partner in the profit sharing ratio.	Cash <span style="float: right;">A/C</span>  Old Partners Capital A/C  New Partner Capital A/C

<b>Goodwill Plan</b>  (If the Partnership capital is increased by more than the amount actually invested by the new partner, this additional amount is called Goodwill)	<u><b>If (b) &gt; (a)</b></u>  Goodwill to the Old Partners in the profit sharing ratio.	Cash A/C  Goodwill A/C  New Partner Capital A/C  Old Partners Capital A/C
	<u><b>If (b) &lt; (a)</b></u>  Goodwill to the New Partner in the profit sharing ratio.	Cash A/C  Goodwill A/C  New Partner Capital A/C

**Note:** (a) = New Partner's Interest

(b) = New Partner's Actual Investment Amount

### Illustrations

Jerry, Adcock and Rose Villa have agreed to allow Richard Davis to invest \$75,000 in return for one-third interest in their partnership. The capital accounts of Jerry Adcock and Rose Villa are assumed to be \$70,000 and \$80,000 respectively.

**Required; Pass the necessary entry.**

**Solution;**

**Step – 1:** Old Partnership Capital; \$ 70,000 +\$ 80,000= \$150,000

**Step – 2:** New Partnership Capital  
 Old Partnership Capital = \$150,000

**ADD:** New Partner's Actual Investment Amount 75,000  
**\$225,000**

**Step – 3:** New Partner's Share in New Partnership Capital= 1/3 X \$225,000= **\$75,000**

**Step – 4:** Compare New Partner's Interest (a) with the New Partner's Investment (b)

**\$75,000=\$75,000(no bonus or no goodwill) this is, simple investment plan**

**Journal entry**

Cash	75,000
Davis's Capital	75,000

(To record admission of Davis in to the partnership)

After a year of operating as partners, the capital accounts of Bob and Kim are \$15,000 and \$10,000, respectively. Sonia buys a 1/6 interest in the partnership by investing cash of \$10,000.

**Required ;**What will be the capital accounts balances of the partners in the new Bob, Kim and Sonia partnership assuming a bonus to the old partners, who share income and loss equally? Prepare the entry in journal form to record the transfer of ownership on the partnership books.

**Solution;**

**Step – 1:** Old Partnership Capital; \$ 15,000 +\$ 10,000= \$25,000

**Step – 2:** New Partnership Capital

Old Partnership Capital	= \$25,000
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<b><u>ADD:</u></b> New Partner's Actual Investment Amount	<u>10,000</u>
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**\$35,000**

**Step – 3:** New Partner's (Sonia's) Share in New Partnership Capital= 1/6 X \$35,000=  
**\$5833.33**

**Step – 4:** Compare New Partner's Interest **(a)** with the New Partner's Investment **(b)**

**\$5833.33 < \$11,000** (the difference (\$5166.67) is bonus to old partners to be shared equally between Bob and Kim (\$5166.67/2=\$2583.335 each) and credited to their capital account. **This is, Bonus Plan**

**Journal entry**

Cash	11,000
Sonia's Capital	5833.33
Bob's capital	2583.335
Kim's Capital	2583.335

(To record admission of Sonia in to the partnership)

After a year of operating as partners, the capital accounts of Alemu and Belete are \$15,000 and \$10,000, respectively. Sara buys a 1/4 interest in the partnership by investing cash of \$5,000.

**Required;** What will be the capital accounts balances of the partners in the new Alemu, Beletu and Sara partnership assuming that the new partner receives a bonus and that Alemu and Beletu share income and losses equally? Prepare the entry in journal form to record the transfer of ownership on the partnership books.

**Solution;**

**Step – 1:** Old Partnership Capital; \$ 15,000 +\$ 10,000= \$25,000

**Step – 2:** New Partnership Capital

Old Partnership Capital = \$25,000

**ADD:** New Partner's Actual Investment Amount 5,000

**\$30,000**

**Step – 3:** New Partner's (Sonia's) Share in New Partnership Capital= 1/4X \$30,000=  
**\$7500**

**Step – 4: Compare New Partner’s Interest (a) with the New Partner’s Investment (b)**

\$7500 > \$5,000 (the difference (\$2500) is bonus to new partner (Sara) be shared equally between Alemu and Belete (\$2500/2=\$1250 each) and debited to their capital account. **This is, Bonus Plan**

**Journal entry**

Cash	5000
Alemu’s Capital	1250
Belete’s capital	1250
Sara’s Capital	7500

(To record admission of Sara in to the partnership)

Dear students, the illustration for the good will method is not given here since you will learn it in detail in your advance accounting course.

**3.9.2 Retirement or Withdrawal of A Partner**

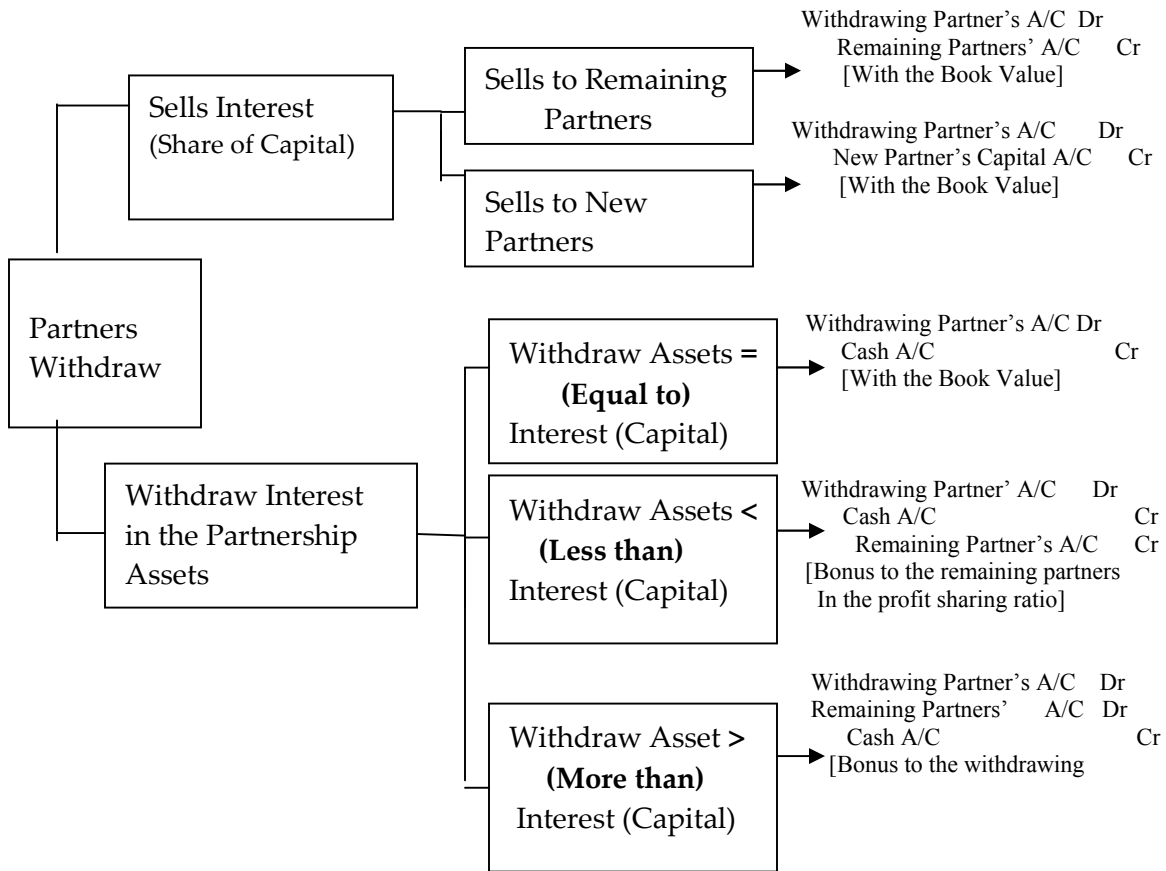
A Partner retiring from a limited partnership usually receives cash or other assets from the partnership. It is also possible that a retiring partner might arrange for the sale of his or her partnership interest to one or more of the continuing partners or to an outsider. Because the accounting principles applicable to the latter situations already have been considered, the discussion of the retirement of a partner is limited to the situation in which the retiring partner receives assets of the partnership.

An assumption underlying this discussion is that the retiring partner has a right to withdraw under the terms of the partnership contract. A partner always has the power to withdraw, as distinguished from the right to withdraw. A partner who withdraws is

violation of the terms of the partnership contract, and without the consent of the other partners, may be liable for damages to the other partners.

## Recording Entries:

### 1. Bonus Method



**Goodwill Method:** Paying less than the withdrawing partner's capital balance (book value) would suggest that existing assets are overvalued. A write-down of existing assets would be recognized as the difference between the withdrawing partner's capital balance and the consideration paid for the partner's interest. As an alternative, the asset write-down traceable to the entire entity could be recognized based on the amount suggested by the transaction with the withholding partner. The write-down traceable to the

withdrawing partner represents his/her percentage interest (based on profit and loss ratios) in the asset write-down traceable to the entire entity.

**Illustration**

After several years of operating as partners, the capital accounts of Cala, Kumala and Derartu are \$25,000, \$16,000 and \$9,000 respectively. They are sharing the profits and loss in the ratio of 5:4:1. Prepare the necessary entry in the following cases.

- a. Derartu decides to sell her interest in the business to Kumala for \$12,000.
- b. Derartu decides to leave the partnership and is allowed to withdraw \$9,000 in cash.
- c. Derartu decides to leave the partnership and is allowed to withdraw \$6,000 in cash.
- d. Derartu decides to leave the partnership and allowed to withdraw \$13,000 in cash.

**Solution**

a. Derartu's Capital	9000
Kumala,s Capital	9000

**Note-** the difference (3000) is not recorded in the partnership's book since the transaction is personal transaction

b. Derartu's Capital	9000
Cash	9000

c. Derartu's Capital	9000
Cash	6000
Cala's Capital	1666.67
Kumala's capital	1333.33

*[Bonus to the remaining partners in their profit sharing ratio. i.e. 5:4] Cala's share=3000X5/9= \$ 1666.67 credited to his capital account; Kumala's share=3000X4/9= \$1333.37 credited to his capital account*

d. Derartu's Capital	9000
Cala's Capital	2222.22
Kumala's capital	1777.78
Cash	13000

*[Bonus to the withdrawing Partner by the remaining partner in their profit sharing ratio. i.e.5:4]*

*Cala's share=4000X5/9= \$ 2222.22 debited to his capital account*

*Kumala's share=3000X4/9= \$1777.78 debited to his capital account*

**Quick Check-3-4**

1. Amar, Akbar and Anthony are partners in an Image Gallery. The balances in the capital accounts of partners as of November 30 are Amar- \$50,000, Akbar- \$60,000 and Anthony- \$90,000 respectively. The partners share income and losses in a ratio of 2:3:5.

Prepare journal entries for each of the following independent conditions.

- i. Luke pays Anthony \$100,000 for 4/5<sup>th</sup> of Anthony's interest.
- ii. Luke is to be admitted to the partnership with a 1/3<sup>rd</sup> interest for \$100,000 cash investment.
- iii. Luke is to be admitted to the partnership with a 1/3<sup>rd</sup> interest for \$160,000 cash investment.
- iv. Luke is to be admitted to the partnership with a 1/3<sup>rd</sup> interest for an \$82,000 cash investment.

2. On December 31, Greg Davis, a member of the partnership of Davis and Pratt, decided to retire. The partners have shared income and losses equally. On this date, their capital account credit balances were:

Greg Davis	\$90,000
Helen Davis	60,000
Eric Pratt	60,000

Prepare entries to record the withdrawal of Greg Davis under each of the following unrelated assumptions. All payments are to be in cash, and the assets are not be revalued.

- a) Greg Davis was paid \$90,000
- b) Greg Davis was paid \$96,000
- c) Greg Davis was paid \$80,000

### **3.10 Liquidation of a Partnership**

Unlike a dissolution where the partnership continues its business purpose, a liquidation results in the partnership's ending or terminating its business. The process of liquidation consists of the conversion of partnership assets into a distributable form and the distribution of these assets to creditors and owners. To achieve an orderly and legally sound liquidation, some fundamental guidelines need to be identified.

#### **Liquidation Guidelines**

The underlying theme in accounting for partnership liquidation is the equitable distribution of the assets. To be equitable, a distribution should recognize the legal rights of the partnership creditors and individual partners. All liquidation expenses and gains or losses from conversion of partnership assets also must be allocated to the partners before assets actually are distributed to the individual partners. Failure to consider these factors may results in the premature or incorrect distribution of assets to a partner. If a

premature or incorrect distribution of assets cannot be recovered, the partnership fiduciary who authorized the distribution may be held liable.

***A partnership may be liquidated if:***

- ❖ The objectives sought in forming the partnership have been achieved.
- ❖ The time period for which the partnership was formed expires (ends)
- ❖ Newly enacted laws have made the partnerships activities illegal,
- ❖ The partnership becomes bankrupt.

The partnership agreement should indicate the procedures to be followed in case of liquidation. Usually, the books (records) are adjusted and closed, with the income or loss distributed to the partners and the assets are sold.

***Steps in the Liquidation Process***

- 1) The sale of the assets at the time of liquidation of a partnership is known as ***realization***.
- 2) As the assets of the business are sold, any gain or loss should be distributed to the partners according to the income and loss sharing ratio.
- 3) As cash is realized, it must be applied first to outside creditors.
- 4) Finally, the remaining cash is distributed to the partners in accordance with the balance of their capital accounts.

**Partnership Liquidation Illustration**

Roba, Sharon, and Dave share profits 30/30/40. On February 28, 2007 the partnership had the following balance sheet:

Cash	\$ 20,000	Accounts Payable	\$ 30,000
Inventory	\$ 50,000	Roba, Capital	\$ 30,000
Supplies	\$ 25,000	Dave, Capital	\$ 10,000
Land	<u>\$ 5,000</u>	Sharon, Capital	<u>\$ 30,000</u>
<b>Total Assets</b>	<b>\$100,000</b>	<b>Total Liabilities and Capital</b>	<b>\$100,000</b>

During March 1 through 5, 2007, they decided to liquidate their partnership.

At the time of sale of assets a gain or a loss may be realized. And this gain or loss should be beard by partners in accordance with their income and loss-sharing plan.

***Case-1 Gain on realization***

The non-cash assets of Roba, Sharon, and Dave are sold for \$100,000 and the \$ 20,000 gain on the sale is distributed to the partners in their income and loss ratio. The liabilities are paid in full. The remaining cash is distributed to the partners in accordance with the balance of their capital accounts, not in the income and loss ratio. A statement of partnership liquidation, which summarizes the liquidation process, follows

**Roba, Sharon and Dave**

**Statement of partnership liquidation**

**March 1 through 5, 2007**

	<u>Assets</u> = <u>liabilities</u>			<u>Capital</u>		
	<u>Cash</u>	<u>+ other Asset</u>	<u>= A/payable</u>	<u>+ (30%)</u>	<u>(30%)</u>	<u>(40%)</u>
				<b>R</b>	<b>S</b>	<b>D</b>
Bal. before realizations	\$ 20000	\$ 80000	\$ 30000	\$ 30000	\$ 10000	\$ 30000
Sale of non cash assets and division of gain...	+ <u>100,000</u>	- <u>80000</u>	-	+ <u>6000</u>	+ <u>6000</u>	+ <u>8000</u>
Bal. after realization	\$ 120,000	0	\$ 30000	\$36000	\$ 16000	\$38000
Payment of liabilities	- <u>30000</u>	-	- <u>30000</u>	-	-	-
Bal. after payment of liabilities.....	\$ 90000	0	0	\$ 36000	\$ 16000	\$38000
Dist <sup>n</sup> cash to partners	- <u>90000</u>	-	-	- <u>36000</u>	- <u>16000</u>	- <u>38000</u>
Final balances	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

The entries to record the several steps in the liquidation procedure are as follows:

1. To record sale of Assets

Cash		100,000
Non cash Assets		90,000
Gain on sale of Non cash Assets		20,000

2. To distribute the gain on the sale of the assets

Gain on sale of Non cash Assets		20,000
Roba Capital		6000
ScharonCapital		6000
Dave Capital		8000

3. To record the settlement of liabilities

Accounts payable	30000	
Cash		30000

4 Distribution of cash to partners

Roba Capital	36000	
Sharon Capital	16000	
Dave Capital	38000	
Cash		90000

***Case 2. Loss on Realization; No Capital Deficiencies***

The non-cash assets of Roba, Sharon, and Dave are sold for \$ 70,000 and the \$10,000 loss of the sale is distributed to the partners' capital accounts in the income and loss ratio. Then, the liabilities are paid in full. The remaining cash is distributed to the partners in accordance with the balances of their capital accounts.

The journal entries are:

1 To record the sale of the assets

Cash	70000	
Loss on sale of Assets	10000	
Other Assets		80000

2 To distribute the loss on the sale of the assets

Roba capital (\$10000 X 0.30)	3000	
Sharon capital (\$ 10000 X 0.30)	3000	
Dave capital (\$ 10000 X 0.4)	4000	
Loss on sale of Assets		10000

3 To record the settlement of liabilities

Liabilities	30000
Cash	30000

4 To distribute cash to partners

Roba Capital	27000
Sharon capital	7000
Dave capital	26000
Cash	60000

**Case 3 Loss on Realization with capital Deficiency;** In case 2, the loss charged to the capital account of each partner is smaller than that partner's capital account balance. But it is possible that a partner's portion of the loss may be greater than that partner's capital account balance. When a loss is charged to a partner and a debit balance is created in that partner's capital account, the debit balance represents an amount owed by that partner to the partnership. The cash available for distribution will be insufficient to pay the other partners in full until the partner with the debit balance pays in the amount owed. If the partner with the debit balance is unable to pay, the remaining partners must bear this loss in the income and loss ratio existing between them.

To illustrate, assume that non-cash assets of Roba, Sharon, and Dave are sold for only \$30,000.

Required; prepare statement of partnership liquidation and the necessary journal entries under the following independent assumptions

- a) A partner with deficit capital balance paid the amount owed.
- b) A partner with deficit capital balance unable to pay the amount owed.

## Solutions

A.

### Roba, Sharon and Dave

#### Statement of partnership liquidation March 1 through 5, 2007

	<u>Cash</u>	+ <u>other Asset</u>	= <u>Liabilities</u>	<u>Capital</u>		
				R + (30%)	S + (30%)	D (40%)
Bal. Before realization	\$ 20,000	\$ 80,000	\$ 30,000	\$ 30,000	\$ 10,000	\$ 30,000
Sale of asset & division of loss	+30,000	- 80,000	-	-15000	-15000	-20,000
Balance after realization	\$50000	0	\$ 30000	\$15000	\$5000(Dr)	\$10000
Payment of liabilities	- 3000	----	-30000	-	-	---
Bal. After liability payment	\$20000	0	0	\$ 15000	\$5000(Dr)	\$10000
Receipt of deficiency	+ 5000	- ----	----	----	+5000	-----
Balance	\$25000	0	0	\$15000	0	\$10,000
Distribution of cash to partners	-25000	-	-	-15000	0	-10,000
Final Balance	0	0	0	0	0	0

The entries to record the liquidation to this point are as follows:

**1. To record the sale of the assets**

Cash	30000
Loss on sale of Assets	50000
Other Assets	80000

**2. To distribute the loss on the sale of the assets**

Roba capital	15000
Sharon capital	15000
Dave capital	20000
Loss on sale of Assets	50000

**3. To record the settlement of partnership liabilities**

Liabilities	30000	
Cash		30000

**4. To record receipt of deficiency from Sharon**

Cash	5000	
Sharon capital		5000

**5. To record the distribution of cash to partners**

Roba capital	15000	
Dave capital	10000	
Cash		25000

**B.**

**Roba, Sharon and Dave**

**Statement of partnership liquidation  
March 1 through 5, 2007**

	<u>Cash</u>	+ <u>Other Asset</u>	= <u>Liabilities</u>	<u>Capital</u>		
				R (30%)	S (30%)	D (40%)
Bal. Before realization	\$ 20,000	\$ 80,000	\$ 30,000	\$ 30,000	\$ 10,000	\$ 30,000
Sale of asset & division of loss	+30,000	- 80,000	-	-15,000	-15,000	-20,000
Balance after realization	\$50,000	0	\$ 30,000	\$15,000	\$5,000(Dr)	\$10,000
Payment of liabilities	- 3,000	----	-30,000	-	-	---
Bal. After liability payment	\$20,000	0	0	\$ 15,000	\$5,000(Dr)	\$10,000
Division of deficiency	----	- ---	----	2142.86	+5,000	2857.14
Balance	\$20,000	0	0	\$12,857.14	0	\$7,142.86
Distribution of cash to partners	-20,000	-	-	-12,857.14	0	-7,142.86
Final Balance	0	0	0	0	0	0

The entries to record the liquidation to this point are as follows:

**1. To record the sale of the assets**

Cash	30000	
Loss on sale of Assets	50000	
Other Assets		80000

**2. To distribute the loss on the sale of the assets**

Roba capital	15000	
Sharon capital	15000	
Dave capital	20000	
Loss on sale of Assets		50000

**3. To record the settlement of partnership liabilities**

Liabilities	30000	
Cash		30000

**4. To record division of Sharon's deficit capital balance i.e. 5000 debit between Roba and Dave based on their income/loss sharing ratio (30%:40%)**

Roba Capital (3/7X5000)	2142.86	
Dave Capital (4/7X5000)	2857.14	
Sharon Capital		5000

**5. To record the distribution of cash to partners**

Roba capital	12857.14	
Dave capital	7142.86	
Cash		20000

## Chapter Review

**Identify the principal characteristics, advantages, and disadvantages of the partnership form business.** A partnership has several major characteristics that distinguish it from the other forms of business. It is a voluntary association of two or more people who combine their talents and resources to carry on a business. Their joint effort should be supported by a partnership agreement that spells out the venture's operating procedures. A partnership is dissolved by a partner's admission, withdrawal, or death, and therefore has a limited life. Each partner acts as an agent of the partnership's debts property invested in the partnership becomes an asset of the partnership, owned jointly by all the partners. And finally, each partner has the right to share in the company's income and the responsibility to share in its losses.

**The advantages of a partnership** are the ease of its formation and dissolution the opportunity to pool several individuals' talents and resources, the lack of corporate tax burden, and the freedom of action each partner enjoys. **The disadvantages are** the limited life of a partnership, mutual agency, the unlimited personal liability of the partners' and the difficulty of raising large amounts of capital and transferring partner's interest. Two other common forms of associations that are type of partnership or similar to a partnership are; limited partnerships and joint ventures.

### **Record partners' investment of cash and other assets when a partnership is formed**

A partnership is formed when the partners contribute cash, other assets, or a combination of both to the business. The details are stated in the partnership agreement. Initial investments are recorded with a debit to Cash or another asset account and a credit to the investing partner's capital account. The recorded amount of the other assets should be their fair market value on the date of transfer to the partnership. In addition, a partnership can assume an investing partner's liabilities. When this occurs, the partner's Capital account is credited with the difference between the assets invested and the liabilities assumed.

**Compute and record the income or losses that partners share, based on stated ratios, capital balance ratios, and partner's salaries and interest.** The partners must share income and losses in accordance with the partnership agreement. If the agreement says nothing about the distribution of income and losses, the partners share them equally. Common methods used for distributing income and losses include stated ratios, capital balance ratios, and salaries and interest on capital investment. Each method tries to measure the individual partner's contribution to the operation of the business. Stated ratios usually are based on the partners' relative contributions to the partnership. When capital balance ratios are used, income or losses are divided strictly on the basis of each partner's capital. The use of salaries and interest on capital investment takes in to account both efforts (salary) and capital investment (interest) in dividing income or losses among the partners.

**Record a person's admission to a partnership.** An individual is admitted to a partnership by purchasing a partner's interest or by contributing additional assets. When an interest is purchased, the withdrawing partner's capital is transferred to the new partner. When the new partner contributes assets to the partnership, it may be necessary to recognize a bonus shared or borne by the original partners or by the new partner.

**Record a person's withdrawal from a partnership.** A person can withdraw from a partnership by selling his or her interest in the business to the remaining partners or a new partner, or by withdrawing company assets. When assets are withdrawn, the amount can be equal to, less than, or greater than the partner's capital interest. When assets that have a value less than or greater than the partner's interest are withdrawn, a bonus is recognized and distributed among the remaining partners or to the departing partner.

**Compute the distribution of assets to partners when they liquidate their partnership.** The liquidation of a partnership entails selling the assets necessary to pay the company's liabilities and then distributing any remaining assets to the partners. Any gain or loss on the sale of the assets is shared by the partners **according to their stated ratios.** **When a partner has a deficit balance in a capital account, that partner must contribute personal assets equal to the deficit.** When a partner does not have personal

assets to cover a capital deficit, the deficit must be absorbed by the solvent partners according to their stated ratios.

### **Review of Concepts and Terminology**

**Dissolution:** The loss of authority to continue a partnership as a separate entity due to a change in the original association of partners.

**Limited life:** A characteristic of a partnership the fact that any event that breaches the partnership agreement including the admission withdrawal or death of a partner-terminates the partnership

**Limited partnership:** Forms of partnership in which limited partner's liabilities are limited to their investment.

**Liquidation:** A special form of dissolution in which a business ends by selling assets, paying liabilities, and distributing any remaining assets to the partners.

**Mutual agency:** A characteristics of a partnership; the authority of each partner to act as an agent of the partnership within the scope of the business's normal operations.

**Partners' equity:** the owner's equity in a partnership

**Partnership:** An association of two or more people to carry on as co-owners of a business for profit.

**Partnership agreement:** The contractual relationship between partners that identifies the details of their partnership.

**Unlimited liability:** A characteristic of a partnership the fact that each partner has personal liability for all the debts of the partnership.

## Answers to Quick Checks

### Quick checks 3-1

1.
  - Partnership is an association of two or more individuals or entities that are in a legal profit marketing operation
  - Articles of partnership the contractual relationship between partners that identifies the details of their partner ship
  - Limited partnership forms of partnership in which limited partner's liabilities are limited to their investment
  - General partnership forms of partnerships in which each partner is individually liable to creditors for the debts incurred by the partnership

2. Characteristics of partnership

Voluntary association

Partnership agreement

Limited life

Unlimited liability

Mutual agency

Co-ownership of partnership property

Participation in partnerships income

- 3.

<b>Advantages</b>	<b>Disadvantages</b>
<ul style="list-style-type: none"><li>● Easy and inexpensive to form than corporation</li></ul>	<ul style="list-style-type: none"><li>- Unlimited personal liability</li></ul>
<ul style="list-style-type: none"><li>● Pooling of capital and combination of skill than sole proprietorship</li></ul>	<ul style="list-style-type: none"><li>- Partner's act combined partnership in to contract</li></ul>
<ul style="list-style-type: none"><li>● Not subject to separate taxation</li></ul>	<ul style="list-style-type: none"><li>- Limited life</li></ul>
<ul style="list-style-type: none"><li>● More freedom and flexibility of partners</li></ul>	<ul style="list-style-type: none"><li>- Transfer of ownership requires consent of all partners</li></ul>
<ul style="list-style-type: none"><li>● Not restricted by laws</li></ul>	

**Quick Check 3-2**

A.	TG Capital	30,000	
	HT Capital	30,000	
		Income summary	60,000
B.	TG capital	$(\frac{2}{5} \times 60,000)$	240,000
	HT Capital	$(\frac{3}{5} \times 60,000)$	360,000
		Income summary	60,000
C.	TG capital	$(\frac{218600}{406400} \times 60,000)$	32,274
	HT capital	$(\frac{187800}{406400} \times 60,000)$	27,726
		Income summary	60,000

<b>D.</b>	<b>TG</b>	<b>HT</b>	<b>Combined</b>
Interest (10%)	21860 Cr	18780 Cr	40640
Salary	10,000 Cr	—	10,000
Total requirement (50640+60,000)			
$(\frac{110640}{2})$	<u>55320 Dr</u>	<u>55320Dr</u>	
Total distributed	(23460)	(36540)	

**Entry**

TG capital	23460	
HT capital	36540	
	Income summary	60,000

### Quick Check 3.3

1A	Income summary	30,000	
	Bontu capital		150,000
	Roba capital		150,000
1B	Income summary	30,000	
	Bontu capital		12,000
	Rba Capitla		18,000
1C	Income summary	30,000	
	Bontu capital		10,000
	Rba capital		20,000
1D	Income summary	30,000	
	Bontu capital		12,500
	Roba capital		17,500

2. Income summary account's debited and each partner's capital account is credited by their respective share
3. Each partner's capital account is debited by their respective share of note loss and income summary account is credited

### Quick check 3

- i. Anthony capital .....100,000  
    Luke capital .....100, 000
- ii. Cash .....100,000  
    Luke capital .....100,000
- iii. Cash .....160,000  
    Luke capital .....120,000  
    Amar capital .....8, 000

Akbar capital .....12, 000  
 Anthony capital .....20, 000

iv. Cash .....82,000  
 Amar capital .....24, 000  
 Akbar capital .....3, 600  
 Anthony capital .....6, 000  
 Luke capital .....9, 4000

a) Greg Davis capital .....90,000  
     Cash .....90,000

b) Greg Davis capital .....90,000  
     Helen Davis capital .....3, 000  
     Eric Pratt capital .....3, 000  
     Cash .....96, 000

(Bonus to withdrawing partner)

c) Greg Davis capital .....90,000  
     Cash .....80, 000  
     Helen Davis capital ..... 5,000  
     Eric Pratt capital ..... 5,000

(Bonus to renaming partners)

## Review Questions

### Multiple Choice-select the best answer for each of the following

1. Which of the following is an advantage of a partnership?
  - a) Limited liability
  - b) Limited life
  - c) Mutual agency
  - d) Double taxation
2. Mutual agency allows
  - a) Partners to work together
  - b) Other business to conduct business with individual partners
  - c) Partners to conduct business with partnership
  - d) The partnership to conduct business with corporations
3. A and B share equally in their partnership. A&B's current capital balances are \$60,000 and \$40,000 respectively. C contributes \$25,000 for a 20% interest. Using the bonus method, what is A's new capital balance?
  - a) \$72,500
  - b) \$62,500
  - c) \$60,000
  - d) \$57,500

## Problems

1. Peter and Mary are partners who share profits equally. They decide to liquidate their partnership with the following balance sheet:

Cash	\$30,000	Accounts payable	\$20,000
Land	<u>\$40,000</u>	Peter, Capital	\$30,000
		Mary, Capital	<u>\$20,000</u>
		Total liabilities and	
Total assets	\$70,000	Partner's Capital	\$70,000

The partnership sells the land for \$50,000, pays the liabilities, and distributes the remaining cash to the partners.

**Required:**

Prepare the journal entries recorded by the partnership.

2. Quick, Drake, and sage plan to liquidate their partnership. They share income and loss a 3:2:1 ration. On the day of liquidation their balance sheet appears sheet as follows:

Quick, Drake, and sage  
Balance sheet  
May 31

Assets	Liabilities and Equity
Cash.....\$180,800	Accounts payable.....\$245,500
Inventory .....537,200	Quick capital.....93,000
	Drake capital .....212,500
	Sage capital..... <u>167,000</u>
<b>Total assets .....\$718,000</b>	<b>Total liabilities and equity .....\$718,000</b>

**Required**

Prepare the journal entries for the sale of inventory the allocation of its gain or loss, and the distribution of cash in each of the following separate cases: Inventory is sold for (a) \$600,000; (b) \$500,000; (c) \$320,000 and any partners with capital deficits pay in the amount of their deficits; and (d) \$250,000 and the partners have no assets other than those invested in the partnership.

## CHAPTER FOUR

### ACCOUNTING FOR CORPORATIONS

#### **Aims and Objectives**

This unit aims at discussing different issues related to a corporate form of organization such as the characteristics of a corporation, accounting and reporting practical for the issuance of stocks, cash dividends stock dividends, stock splits ,treasures stocks ,earnings per share, and equity per share(book value )per share.

Dear students, after studying this chapter, you will be able to:

- describe the characteristics, advantages and disadvantages of the corporate form of business organization
- explain the rights of stockholders and the role of corporate directions.
- differentiate among authorized, issued and outstanding shares.
- Account for the issuance of capital stock
- understand the nature of accounting for dividends and stock splits
- account for treasury stock transactions
- know how to calculate earnings per share and book value per share

## **4.1 Introduction**

Assume that you are planning to start a new business. Would you choose a sole proprietorship, a partnership or a corporation? In principles of accounting 1 and previous chapter of principles of accounting you have studied about the first two forms of business organizations. In this chapter the importance of corporate form of organization will be discussed.

## **4.2 Definition of Corporation**

- A corporation is a legal entity having an existence separate and distinct from that of its owners
- A corporation is a legal entity whose capital is fixed in advance and divided in to transferable units known as shares and whose liabilities are met only by its own assets.
- It is an entity recognized by law as possessing and existence separate and distinct from its owners.
- In the eyes of the law there are two persons and a corporation is an ‘artificial person’ having many of its own rights and responsibilities.

## **4.3 Characteristics of Corporation**

- a) A corporation is a separate legal entity. According to the law a corporate entity may own property in its own name, may enter into contract and responsible for its own debts.
- b) A corporation has a legal status in court. According to the law a corporation may sue and be sued as if it were a real person.
- c) A corporation has its own charter. A corporation is created by obtaining charter from the state in which the company is to be incorporated.
- d) A corporation pays income taxes on its earnings. The income of a corporation is subject to income taxes, which must be paid by the corporation.

#### 4.4 Advantages of the Corporate Form of Organization

A corporate entity has many advantages not available in other forms of organization. Some of the advantages are as follows;

- a) **Continuous existence:** because a corporation is a separate legal entity, an owner's death, incapacity or withdrawal does not affect the life of the corporation. The life of a corporation is set by its charter and regulated by state laws.
- b) **Limited liability:** because a corporation is a separate legal entity, it is responsible for its own actions and liabilities. This means that a corporation's creditors can satisfy their claims only against the assets of the corporation, not against the personal property of the corporation's owners. Because the owners are not responsible for the corporation's debts, their liability is limited to the amount of their investment.
- c) **Separation of managements from ownership:** the owners of a corporation (called stock holders or shareholders) own the corporation but they do not manage it on a daily basis. To administer the affairs of the corporation, president and other officers are hired for it. Thus, individual stockholder has no rights to participate in the management's activity of the corporation unless the stockholder has been hired as a corporate officer.
- d) **Ease of transfer of ownership:** A share of stock, a unit of ownership in a corporation, is transferable. A stockholder can normally buy and sell shares without affecting the corporation's activities or needing the approval of other owners.
- e) **Separate legal entity:** A corporation is a separate legal entity that has most of the rights of a person except those such as voting and marrying. As such, a corporation can buy, sell, or own property; sue and be sued; enter in to contracts; hire and fire employees; and be taxed.

- f) **Ease of capital generation:** it is fairly easy for a corporation to raise capital because shares of ownership in the business are available to a great number of potential investors for a small amount of money. As a result, a single corporation can be owned by many people.
- g) **Professional management:** large corporations are owned by many people, the vast majority of whom are unequipped to make timely decisions about business operations. So, in most cases, management and ownership are separate. This allows a corporation to hire the best talent available to, manage the business.

#### **4.5 Disadvantages of Corporate Form of Organization**

Some of the disadvantages of the corporation are:

- a) **Double taxation:** corporate earnings are taxed two times. The earnings are taxed first as a corporate income tax and again as personal income taxes of the corporation. Distributes its earnings to stockholders.
- b) **Difficulties to control:** since ownership is usually separated from managements, owners are unable to exercise active control over management actions. Sometimes management makes decisions that are not good for the corporation as a whole.
- c) **Government regulation:** corporations must meet the requirements of state laws. Since a corporation comes into existence according to the law of the state, the law may provide for considerable regulation of the corporation's activities. For example, the withdrawal of funds from a corporation is subjects to certain limits sets by law.

#### **4.6 Accounting for corporations**

##### **4.6.1 Definitions of terms**

- ❖ Capital stock: - represents shares (units) of ownership in a company.
- ❖ Stock certificate: - a written document given to stockholders indicating evidence of Ownership in the company.

- ❖ Authorized capital stock: - the number of shares of capital stock that a corporation is permitted to issue.
- ❖ Outstanding capital stock: - the number of authorized shares of stock that have been issued and currently held by stockholders.
- ❖ Par value: - an arbitrary monetary amount assigned to each share of a given class the amount per share that is credited to the capital stock for each share issued.
- ❖ Stated value: - an arbitrary amount assigned by board of directors to each share of a given class of no par value capital stock.

#### **4.6.2 Formation of a Corporation**

A corporation is created by obtaining a corporate charter. The charter is given from the states in which the corporation is to be incorporated. To obtain a corporate charter an application called articles of incorporation are prepared by the organizers called incorporators and submitted to the state corporations commissioner or other designated officials. These articles of incorporation specify the purpose of the business, its location, the names of the organizers, the classes and numbers of shares of capital stock authorized, and the consideration to be paid in by the organizers for their respective shares. The article of incorporation is approved by the state and charter is issued. Once a charter is obtained a board of directors is elected. The directors in turn hold meetings at which officers of the corporation are appointed.

##### **4.6.2.1 Organization costs**

In the process of incorporation, the organizers must pay for necessary costs such as payment of an incorporation fee to the state, payment of fees to attorneys for their services in drawing up the articles of incorporation, payment to promoters and variety of other outlays necessary to bring the corporation into existence. These costs are charged to an asset account called organization costs.

**Recording:**-Organization costs are debited to an intangible asset account called organization cost and amortized over a period not exceeding 40 years.

#### 4.6.2.2 Rights of Stockholders

The stockholders who are the owners of a corporate entity have the following basic rights:

- a) ***The rights to votes:*** the common stockholders have the right to elect the board of directors, and thereby to be represented in the management of the business.
- b) ***The rights to participate in the earnings of a corporation:*** Stockholders in corporations may not make withdrawal of company assets. However, the earnings of a profitable corporation may be distributed to stockholders in the form of cash dividend. The payment of a dividend always requires formal authorization by the board of directors.
- c) ***The rights to share in the distribution of assets upon liquid action:*** when a corporation ends its existence, the creditors of the corporation must first be paid in full; any remaining assets are divided among stockholders in proportion to the number of shares owned.
- d) ***Pre-emptive rights:*** the current stockholders have the right to purchase the shares of the corporation on a prorated basis when new stocks are offered for sale. This preemptive right is designed to provide each stockholder the opportunity to maintain a proportional ownership in the corporation.

#### Quick Check 4 -1

1. Which of the following is not an advantage of a corporation?
  - a) Limited liability
  - b) Ease of transfer of ownership
  - c) Government regulation
  - d) None
2. Which of the following is true about a corporation?
  - a) It is an artificial person
  - b) It is an accounting entity
  - c) It is a separate legal entity
  - d) All

3. The number of shares of capital stock that a corporation is permitted to issue is known as-----
- a) Outstanding capital stock
  - b) Capital stock
  - c) Authorized capital stock
  - d) none
4. Explain the meaning of the term double taxation as it applies to corporate profits.
5. Briefly explain the advantages of corporation over partnership and sole proprietorship.

#### **4.6.3 Corporate capital**

Stockholder's equity:- are owner's claims against the business; owner's equity in a company

- The equity section of the corporate balance sheet is divided into two parts:
  - Contributed capital: - represents investments made by the stockholder's in the corporation.
  - Contributed capital is also known as paid in capital
  - Retained earnings:- part of the earnings reinvested in the corporation
- Contributed capital and retained earnings are the two principal sources of corporate capital.
  - Dividends:-part of profit which is distributed to stockholders.
  - Stockholder's rights: - stockholders are not directly involved in the management of the business unless they are elected to serve as directors or officers.
- The rights enjoyed by the stockholder's in the company are:
  - The right to participate in management indirectly by voting at the stockholders meeting
  - The right to receive dividends when declared
  - The right to transfer their shares

- The pre-emptive right – the right to buy additional newly shares already owned
  - The right to share assets in liquidation.
- Classes of Capital stock
- A corporate form of business may issue two kinds of stock: common and preferred stock.
- (i) **Common stock**:- a stock that is issued by any corporation and that provides basic ownership in a corporation :-
- The right to vote
  - The right to share in profits
  - The pre-emptive right
  - The right at liquidation to receive a proportionate share of the net assets remaining.
- Common stock holders are the legal Owner's of a corporation and in effect they bear the risk if the corporation is not successful.
- At the time of liquidation of a corporation the claim of common stockholders is settled at last after the claims of all others are settled.
- (ii) **Preferred stock**
- A class of stock having preferential right over common stock.
  - The most commonly given preferential right of preferred owners may relate to dividends, liquidation, convertibility and callable.
  - Preferred to attract investors by providing special rights when there is a need for additional capital
  - Owners of preferred stock give up some of the rights that common stock holders have in order to obtain special privileges that reduce the riskness of their investment.

#### 4.6.4 Accounting for stock issuance

- Issuance of stock refers to the distribution of shares to investors in exchange for cash or other assets.
- When a stock is issued  
Asset ----- xx  
Capital stock ----- xx
- Stock issued may have:-
  - Par value
  - No par value but stated value
  - No par value, No stated value
- Stocks may be issued at par or stated value, or at an amount higher or lower than par or stated value,
- When a stock is issued (sold) for an amount greater than its par or stated value, the excess amount is called premium and is credited to a capital account called paid in capital in Excess of par.
- Capital stock may be issued (sold):-
  - For cash
  - For non cash assets or through subscription

##### (a) Issuance of capital stock for cash

##### Example

Assume that on January 1, 2008 GYB share co authorized to issue 80,000 shares of common stock and sold 30,000 shares on January 14, 2008 for birr200 per share.

##### Required

Make the necessary journal entries to record issuance of stock if the shares are from:-

- A) 140 birr par common stock
- B) No par value but 160 birr stated value common stock
- C) No par value, No stated value common stock

**Solution;**

A. Cash (Br. 200X30,000 shares)	6,000,000	
Common stock (Br.140X 30,000shares)		4,200,000
Paid in capital in excess of par (Br.60X30, 000 shares)		1,800,000
B. Cash (Br. 200X30, 000 shares)	6,000,000	
Common stock (Br.160X 30,000shares)		4,800,000
Paid in capital in excess of stated value (Br.40X30, 000 shares)		1,200,000
C. Cash (Br. 200X30,000 shares)	6,000,000	
Common stock (Br.200X 30,000shares)		6,000,000

**(b) Issuance of capital stock for Non cash Assets**

- Corporations sometimes issue capital stock for non-cash assets such as in exchange for real estate.
- When a stock is issued in exchange for assets or services other than cash it is called Issuance of capital stock for Non cash Assets
- The current markets value of the stock issued or the non-cash consideration received, whichever is most reliable, determinable, is used to record the transaction. If the market value of either capital stock issued or the non cash items are not reliable, the value is established by the corporation's board of directors.

**Example**

On March 13, 2008, TOM share co issued 2,000 shares of Birr 100 par value common stock with fair market value of Birr160 per share in exchange for a land to be used as a future building site.

**Required; Make the necessary journal entry required**

**Solution**

Land (Br. 160X2, 000 shares)	320,000	
Common stock (Br.100X 2,000shares)		200,000
Paid in capital in excess of par (Br.60X2, 000 shares)		120,000

**(c) Stock sold on subscription basis**

During the start-up of a corporation, prospective investors may sign a contract to purchase a specified number of shares on credits with payments due at one or more specified future dates. One reason for this procedure is to attract small investors. Another reason is to appeal to investors who prefer not to invest cash until the corporation is ready to start business operations. A corporation may also sell its capital stock on credit after incorporation.

When stock is subscribed, the company passes the following journal entries.

- **Receipt of subscription**

Stock subscription Receivable-----xx	
Capital stock subscribed-----	xx

- **Collection of stock subscription Receivable**

Cash-----xx	
Stock subscription Receivable-----xx	

- **Issuance of stock certificate**

Capital stock subscribed-----xx	
Capital stock-----xx	

The following illustration demonstrates the accounting procedures for stock subscriptions.

Samsung share co. offers stock on subscription basis to selected individuals giving them the right to purchase on subscription basis .The following were transactions related to stock sold on subscription basis during the year 2008.

- Feb12. Received subscription for 20,000 shares of \$100 par value common stock at \$120 per share with down payment of 20% of subscription price
- April 2. Received 70% of outstanding subscription Receivable
- May7. Collected the remaining balance and issued a stock certificate.

**Required; Prepare entries required for the transactions.**

Feb.12. Receipt of subscription

Cash (20% X \$120 X20, 000shares) -----	480,000
Stock subscription Receivable (80% X \$120 X20, 000shares) ----	1,920,000
Common stock subscribed (\$100 X20, 000shares) -----	2,000,000
Paid-in-capital in excess of par (\$20 X 20,000 shares) -----	400,000

April 2. Collection of stock subscription Receivable

Cash (70% X 1,920,000) -----	1,344,000
Stock subscription Receivable-----	1,344,000

May 7. Collected the remaining balance and Issuance of stock certificate

Cash (1,920,000 -1,344,000) -----	576,000
Stock subscription Receivable-----	1576,000
Common stock subscribed-----	2,000,000
Common stock-----	2,000,000

## **4.6.5 Accounting For Cash and stock Dividends**

### **4.6.5.1 Definition and types of dividends**

A dividend is a distribution of earnings to stockholders in the form of assets or shares of the issuing company's stock. Type of dividends includes the following.

- a) Cash dividend
  - Cash disbursed
- b) Property Dividend
  - Non cash assets disbursed
- c) Stock Dividend
  - Corporations own stock disbursed
- d) Liquidating Dividend
  - Return of contributed capital
- e) Scrip Dividend
  - Creation of a liability by declaring a dividend to be paid at a specific future date

#### 4.6.5.2 Relevant dividend dates

Prior to payment, dividends must be declared by the board of directors of the corporation.

The important dividend dates are:

- a) ***Date of Declaration:*** on this date, the corporation's board of directors formally approves and announces the dividend to be distributed. The declaration is recorded on this date as a debit to dividends and a credit to dividends payable.
- b) ***Date of record:*** the date on which ownership of stock for the purpose of receiving a dividend is determined.
- c) ***Date of payment:*** this date is determined by the board of directors and is usually stated in the declaration. At the date of payment the liability recorded at the date of declaration is debited and the appropriate asset account is credited.

#### 4.6.5.3 Dividend and Characteristics of preferred stock

- A corporation with both preferred stock and common stock may declare dividends on the common only after it meets the requirements of the stated dividend on the preferred. In other words, when dividends are declared by board of directors

preferred shareholders should be paid for a certain amount they are entitled before any dividends are paid on common shares.

- For par value preferred stock, the dividend is stated as a percentage of the par value.
- For non- par preferred stock the dividend is stated as a specific dollar amount per share per year. Thus, the preferred dividend may be stated in monetary terms or as a percent of par.

### **Classification of preferred shares**

- Preferred stock may be:-
  - ❖ Preferred as to dividends or
  - ❖ Preferred as to assets in the event of liquidation, convertible or non-convertible and callable

### **Stock preferred as to dividends**

Stock preferred as to dividends may be either:-

- ❖ Commutative or non – commutative, or
- ❖ Participating or non- participating

### **I. cumulative or Non- commutative preferred stock**

Commutative Preferred stock means that if the company fails to pay a preferred dividend, its obligation accumulates and all omitted dividends must be paid in the future before any common dividends are paid. The cumulative preferred stockholders would receive all accumulated unpaid dividends (called dividend in arrears) before the holders of common shares receive anything. Preferred stock not having this cumulative right is called non-cumulative. That is, the right to receive dividend is cancelled or prohibited in any year in which dividends are not declared.

### **Illustration**

During the past three years Malgarin share co. has outstanding (issued) 120,000 shares of \$ 80 par common stock and 5,000 shares of \$ 100 par 10% preferred stock, the co declared and paid cash dividends as follows.

2005	\$50
2006	no dividends declared and paid by the board of directors
2007	\$ 150,000

**Required;** Determine the total dividends paid to each classes of stock in each years if preferred shares are:-

- (a) Commutative                      (b) Non- commutative

**Solution;**

Preferred dividend per share = 10% X\$100 par=\$10 per share

Preferred annual dividend=\$10 pershareX5, 000 shares=\$50,000

**(a) Cumulative**

Year	Preferred dividend	common dividend	combined
2005	\$50,000	\$ 0	\$50,000
2006	0	0	0
2007	100,000 <sup>A</sup>	50,000 <sup>B</sup>	150,000

**A=\$50,000dividend in arrears (2006) + \$50,000 dividend of 2007.                      B=150,000-100,000**

**(b) Non- cumulative**

Year	Preferred dividend	common dividend	combined
2005	\$50,000	\$ 0	\$50,000
2006	0	0	0
2007	50,000 <sup>A</sup>	100,000 <sup>B</sup>	150,000

**A=only current year dividend is paid for non cumulative p/stock holders.                      B=150,000-50,000**

## II. Participating or Non participating preferred stock

- Participating preferred stock: - provides the right to receive dividends in excess of a certain amount after a comparable dividend is paid on common shares. That is, Participating preferred stock receives a minimum dividend but also receives higher dividend when the company pays substantial dividends on common shares
- Non participating preferred stock: - preferred stock that is entitled to its cumulative stated dividends only, regardless of the size of dividends paid on common stock.

### Illustration

During the year 2007, **United Share Co** has outstanding 10,000 shares of \$100 par common stock and 5,000 shares of \$150 par 6% preferred stock. During this year the co. declared and paid cash dividends of \$1,500,000.

**Required; Determine the total dividends paid to each classes of stock if preferred shares are:-**

- Non participating
- Participating on a share to share basis if dividends declared exceed the regular preferred dividends and comparable dividends on common shares.

### Solution;

Dividend per share of preferred stock=6% $\times$ \$150 par=\$90 per share

#### a. Non participating

Preferred dividend= \$90 per share  $\times$  5,000 shares= \$450,000

Common dividend=\$1,500,000-\$450,000 = \$ 1,050,000

Total-----\$ 1,500,000

#### b. Participating

Preferred dividend= \$90. per share  $\times$  5,000 shares= \$450,000

Comparable dividend on common shares = \$90 per share  $\times$  10,000 shares= \$ 900,000

Balance=\$1,500,000-\$1,350,000= \$150,000

Balance per total share=\$150,000/15,000 shares= \$10 per share

Preferred share holders' share of the balance= \$10 per share  $\times$  5,000 shares= \$50,000

Common shareholders' share of the balance = \$10 per share x 10,000 shares = \$100,000

Therefore, Total preferred dividend = \$450,000 + \$50,000 = \$500,000

Total common dividend = \$900,000 + \$100,000 = \$1,000,000

### **Accounting for Stock Dividend**

A **stock dividend** is a proportional distribution of shares of a corporation's stock to its shareholders. A stock dividend does not change the firm's assets and liabilities because there is no distribution of assets, as there is when a cash dividend is distributed. A board of directors may declare a stock dividend for several reasons.

- 1) It may want to give stockholders some evidence of the company's success without paying a cash dividend, which would after working capital
- 2) It may seek to reduce the stock's market price by increasing the number of shares outstanding although this goal is more often met by a stock split
- 3) It may want to make a nontaxable distribution to stockholders. Stock dividends that meet certain conditions are not considered income so they are not taxed.
- 4) It may wish to increase the company's permanent capital by transferring an amount from retained earnings to contributed capital.

The total stockholders' equity is not affected by a stock dividend. The effect of a stock dividend is to transfer a dollar amount from retained earnings to the contributed capital section on the date of declaration. The amount transferred is the fair market value (usually, the market price) of the additional shares to be issued. The laws of most states specify the minimum value each share transferred under a stock dividend, which is normally the minimum legal capital (par or stated value). However, generally accepted accounting principles state that market value reflects the economic effect of small stock distributions (less than 20 to 25 percent of a company's outstanding common stock) better than par or stated value does. For this reason, market price should be used to account for small stock dividends. To illustrate the accounting for a stock dividend, let us assume that Cap Rock Corporation has the following stockholders equity structure.

### Contributed capital

Common stock \$5,par value 100,000 shares	
Authorized 30,000 shares issued and outstanding	\$150,000
Paid capital in excess of par value common	30,000
Total contributed capital	\$180,000
Retained earnings capital	900,000
Total stockholders' equity	\$1,080,000

Suppose that the board of directors declares a 10 percent stock dividend on February 24, distributable on March 31 to stockholders of record on March 15, and that the market price of the stock on February 24 is \$20 per share. The entries to record the declaration and distribution of the stock dividend are shown below.

#### Date of Declaration

Feb. 24	Stock dividends Declared	60,000	
	Common stock distributable		15,000
	Paid-in capital in excess of par Value, common		45,000
	Declared a 10 percent stock dividend On common stock distributable on March 31 to stockholders of record On March 15 30,000 shares x 10% = 3,000 shares 3,000 shares x \$20/share = \$60,000 3,000 shares x \$5/share = \$15,000		

Date of record

March 15      No entry required

Date distribution

Mar. 31 Common stock Distributable	15,000	
	Common stock	15,000
Distributed a stock dividend of 3,000 shares		

### **Stock splits**

A stock split occurs when a corporation increases the number of issued shares of stock and reduces the par or stated value proportionally. A company may plan a stock split when it wants to lower the stock's market value per share and increase the demand for the stock at this lower price. This action may be necessary if the market value per share become so high that it hinders the trading of the stock or if the company wants to signal to the market its success in achieving its operating goals. For example the action of the Gillette Company in a recent year in declaring a 2-for-1 stock split and raising its cash dividend achieved these star ate share price to \$106 from an earlier share price of \$77. After the stock split the number of shares outstanding doubled thereby cutting the share price in half and also the dividend per share. Most important, each stockholder's total wealth is unchanged as a result of the stock split.

To illustrate a stock split suppose that cap rock corporation has 30,000 shares of \$5.00 par value stock outstanding. The market value is \$70.00 per share. The corporation plans a 2-for -1 split. This split will lower the par value to \$2.50 and increase the number of shares outstanding to 60,000. A stockholder who previously owned 400 shares of the \$5.00 par stock would own 800 shares of the \$2.50 par stock par stock after the split. When stock split occurs the market value tends to fall in proportion to the increase in outstanding shares of stock. For example a 2-for-1 stock split would cause the price of the stock to drop ny approximately 50 percent, to about \$35.00. It would also halve earnings

per share and cash dividends per share (if the board does not increase the dividend). The lower price and the increase in shares tend to promote the buying and selling of shares.

A stock split does not increase the number of shares authorized. Nor does it change the balances in the stockholders' equity section of the balance sheet. It simply changes the par value and the number of shares issued, both shares outstanding and shares held as treasury stock. Therefore an entry is not necessary. However, it is appropriate to document the change by making a memorandum entry in the general journal.

July 15 The 30,000 shares of \$5 par value common stock that are issued and outstanding were split 2 for 1, resulting in 60,000 shares of \$2.50 par value common stock issued and outstanding.

### **Before stock split**

#### Contributed capital

Common stock \$5 par value 100,000 shares	
Authorized, 30,000 shares issued and outstanding	\$150,000
Paid-in capital in excess of par value common	30,000
Total Contributed capital	\$180,000
Retained Earnings	900,000
Total stockholders' equity	\$1,080,000

## After stock split

### Contributed capital

Common stock, \$2.50 par value 100,000 shares	
Authorized 60,000 shares issued and outstanding	\$150,000
Paid-in capital in excess of par value common	30,000
Total contributed capital	\$180,000
Retained Earnings	900,000
Total Stockholders equity	\$1,080,000

Although the amount of stockholders' equity per share would be half as much each stockholders' proportionate interest in the company would remain the same.

If the numbers of split shares will the number of authorized shares, the board of director must secure state stockholders approval before it can issue additional shares.

### ii. Stock preferred as to assets

- This refers to preference in terms of the assets of the corporation in the case of liquidation.
- If the corporations' existence is terminated, the preferred stockholders have the right to receive the par value of their stock or a legal stated liquidation value per share before the common stockholders receive any share of the company's assets. This preference can also include any dividends in arrears owed to the preferred stockholders.

### iii. Convertible preferred stock

- ✓ A corporation can make its preferred stock more attractive to investors by adding convertibility
- ✓ Preferred stocks that can be converted in to common stock of the issuing corporation by the holders are known as convertible preferred stock.
- ✓ People who hold convertible preferred stock can exchange their shares of preferred stock for shares of company's common stock at a ratio stated in the preferred stock contract.
- ✓ Convertibility appeals to investors for two reasons. First, like all preferred stockholders, owners of convertible stock are more likely to receive regular dividends than are common stockholders. Second, if the market value of the company's common stock rises, the conversion feature allows the preferred stockholders to share in the increase.

### iv. Callable preferred stock

Most preferred stock is Callable preferred stock. That is, it can be redeemed or retired at the option of the issuing corporation at a price stated in the preferred stock contract. A stock holder must surrender nonconvertible preferred stock to the corporation when asked to do so and inform convertible preferred share holders either to surrender their stock or convert it to common share.

#### 4.6.6. Accounting for treasury stock

**Treasury stock** is capital stock, either common or preferred, that has been issued and later reacquired by the issuing company but has not subsequently been resold or retired. The company normally gets the stock back by purchasing the shares on the market. It is common for companies to buy and hold their own stock. In a recent year, 392, or 65 percent, of 600 large companies held treasury stock. Although the purchase of treasury stock can be a severe drain on cash, a company may purchase its own stock for several reasons:

- 1) It may want stock to distribute to employees through stock option plans.
- 2) It may be trying to maintain a favorable market for its stock.
- 3) It may want to increase its earnings per share or stock price per share.
- 4) It may want to have additional shares of stock available for such activities as purchasing other companies.
- 5) It may want to prevent a hostile takeover.

A treasury stock purchase reduces the assets and stockholders' equity of the company. It is not considered a purchase of assets, as the purchase of shares in another company would be. Treasury stock is capital stock that has been issued but is no longer outstanding. Treasury shares can be held for an indefinite period of time reissued, or retired. Like unissued stock, treasury stock has no rights until it is reissued. Treasury stock does not have voting right, rights to cash dividends and stock dividends, or rights to share in assets during liquidation of the company, and it is not considered to be outstanding in the calculation of book value. However, there is one major difference between unissued shares and treasury shares: A share of stock that originally was issued at par value or greater and fully paid for, and that then was reacquired as treasury stock, can be reissued at less than par value without negative consequences.

### **Purchase of treasury stock**

When treasury stock is purchased, it is normally recorded at cost. The transaction reduces both the assets and the stock holders' equity of the firm. For example, assume that on September 15 the King Corporation purchases 1,000 shares of its common stock on the market at a price of \$50 per share. The purchase would be recorded as follows:

Sept. 15	Treasury stock Common	50,000	
	Cash		50,000

Acquired 1,000 shares of the Company's common stock for \$50 per share

The treasury shares are recorded at cost. The par value, stated value, or original issue price of the stock is ignored. The stockholders equity section of King's balance sheet shows the cost of the treasury stock as a deduction from the total of contributed capital and retained earnings:

### **Contributed Capital**

Common stock, \$5 par value, 100,000 shares authorized, 30,000 shares issued, 29,000 shares outstanding	\$150,000
Paid-in capital in excess of par value, common	30,000
Total contributed capital	\$180,000
Retained earnings	900,000
Total contributed capital and retained earnings	\$1,080,000
Less Treasury stock, Common (1,000 shares at cost)	50,000
Total stockholders' Equity	\$ 1,030,000

Notice that the number of shares issued, and therefore the legal capital has not changed, although the number of outstanding shares has decreased as a result of the transaction.

### **Sale of treasury stock**

Treasury shares can be sold at cost, above cost or below cost. For example, assume that on November 15 the 1,000 treasury shares of the King corporation are sold for \$50 per share. The following entry records the transaction:

Nov. 15	Cash	50,000	
	Treasury stock, Common		50,000
	Reissued 1,000 shares of treasury Stock for \$50 per share		

When treasury shares are sold for an amount greater than their cost, the excess of the sales price over cost should be credited to paid-in capital, Treasury stock. No gain should be recorded. For example, suppose that on November 15 the 1,000 treasury shares of the King corporation are sold for \$60 per share. The entry for the reissued would be as follows:

Nov. 15	Cash	60,000	
	Treasury stock, common		50,000
	Paid-in capital treasury stock		10,000
	Sold 1,000 shares of treasury Stock for \$60 per share; cost was \$50 per share.		

If treasury shares sold below their cost, the difference is deducted from paid-in capital treasury stock. When this account does not exist or its balance is insufficient to cover the excess of cost over the reissue price, Retained Earnings absorbs the excess. No loss is recorded. For example suppose that on September 15, the King Corporation bought 1,000 shares of its common stock on the market at a price of \$50 per share. The company sold 400 shares of its on October 15 for \$60 per share and the remaining 600 shares on December 15 for \$42 per share. The entries for these transactions are as follows:

Sept.15.	Treasury stock, common	50,000	
	Cash		50,000
	Purchased 1,000 shares of Treasury stock at \$50 per share		

Oct. 15	Cash	24,000	
	Treasury stock, common		20,000
	Paid- in capital, treasury stock		4,000
	Sold 400 shares of treasury		
	Stock for \$60 per share; cost		
	was \$50 per share		
Dec. 15	Cash	25,200	
	Paid- in capital treasury stock	4,000	
	Retained Earnings	800	
	Treasury stock, Common		30,000
	Sold 600 shares of treasury		
	Stock for \$42 per share; cost		
	was \$50 per share		

In the entry for the December 15 transaction Retained earnings is debited for \$800 because the 600 shares were sold for \$4,800 less than cost. That amount is \$800 greater than \$4,000 of paid-in capital generated by the sale of the 400 shares of treasury stock on October 15.

### **Retirement of treasury stock**

If a company that it will not reissue stock it has purchased, with the approval of its stockholders it can retire the stock. When shares of stock are retired, all items related to those shares are removed from the related capital accounts. When treasury stock whose acquisition price is less than the original contributed capital is retired the difference is recognized in paid-in capital retirement of stock. However, when the acquisition price is more than was received when the stock was first issued, the difference is a reduction in stockholders' equity and is debited to retained earnings. For instance, suppose that instead of selling the 1,000 shares of treasury stock it purchased for \$50,000 King decides to retire the shares on November 15. Assuming that the \$5 par value common stock was originally issued at \$6 per share, this entry records the retirement:

Nov. 15	Common Stock	5,000	
	Paid-in capital in excess of		
	Par value common	1,000	
	Retained Earnings	44,000	
	Treasury stock, common		50,000
	Cost \$50 per share and were		
	Issued originally at \$6 per share		

**QUICK CHECK 4-2**

- 1) During the past three years Tom share co. has outstanding 100,000 shares of \$ 50 par common stock and 10, 000 shares of \$ 90 par, 10% preferred stock, the co declared and paid cash dividends as follows.

2005	\$ 0
2006	80,000
2007	155,000

**Required;** Determine the total dividends paid to each classes of stock if preferred shares are:-

- (a) Cumulative                      (b) Non- cumulative

- 2) During the year 2007 Miracle share co has outstanding 20,000 shares of \$65 par common stock and 10,000 shares of \$80 par 5% preferred stock. During this year the co. declared and paid cash dividends of \$180,000.

**Required;** Determine the total dividends paid to each classes of stock if preferred shares are:-

- a. Non participating  
b. Participating

- 3) On March 12, 2007 Wabe share co had 200,000 authorized, 100, 000, \$ 100 par issued and outstanding common shares. On March25, 2007; 10,000 shares of the outstanding common shares were reacquired at \$ 110 per share.

**Required**

- a. Make the entry required to handle the above transaction, and
  - b. Determine the number of shares outstanding.
- 4) Wabe Company, in question 3 above sold: \_
- a. 300 shares of its treasury stock for \$110 on April 11, 2007.
  - b. 250 shares of its treasury stock \$130 each on June 5, 2007
  - c. 450 share of its treasury stock at \$ 90 per share on July26, 2007

**Required**

Record the resale of treasury stock and determine the number of shares outstanding.

#### 4.6.7 Corporate Financial Statements

##### A. The corporate Income Statement

- **Income tax**
  - ❖ Since a corporation is a separate legal entity, it is required by law to pay tax on its earnings. The earnings are taxed first as a corporate income tax and again as personal income taxes.
- **Earning per share**
  - ❖ Earning per share, also called net income per share, is the amount of income earned per share of the company's outstanding common stock. It provides a measure of over all performance and is indicators of the possible amount of dividends that may be expected.

❖ **Formula**

$$\text{Earnings per share (EPS)} = \frac{\text{Net income – preferred stock dividend}}{\text{Number of common stock out standing}}$$

- ❖ Investors need earnings per share information to judge a company's performance and to compare it with the performance of other companies for making investment decisions.
- ❖ The earnings per share information are disclosed on the income statement below the net income.
- ❖ Note that, EPS does not show how much is paid as dividend and how much is retained.

**Illustration**

Below is an income statement for Top up Corporation for the year ended December 31, 2007.

**Top Up Corporation**

**Income Statement**

**For the year ended Dec 31, 2007**

Net sales	\$ 4,500,000
Cost of goods sold	<u>2,300,000</u>
Gross profit	2,200,000
Operating Expenses	<u>1,000,000</u>
Income before tax	<u>1,200,000</u>
Income tax expense (30%)	<u>360,000</u>
Net income	<b><u>\$840,000</u></b>

**Required;**

Determine earnings per share if there are 100,000 shares of outstanding common stock and the company declared dividend \$40,000 on its noncumulative preferred stock.

**Solution;**

$$\begin{aligned} \text{Earnings per share} &= \frac{\text{Net income – preferred stock dividend}}{\text{Number of common stock out standing}} \\ \text{(EPS)} &= \frac{\$840,000 - \$40,000}{100,000 \text{ shares}} = \$8 \text{ per share} \end{aligned}$$

**B. Retained Earnings Statement**

- A financial statement that shows changes that occurred in retained earnings during specific accounting period. Retained earnings generally consist of a company's cumulative net income less any losses and dividends declared since its inception.
- Retained Earnings Statement is intended to achieve the following purposes;
  - ✓ It reports all changes in retained earnings during the accounting period
  - ✓ It reconciles the beginning and ending balances of retained earnings, and
  - ✓ It provides link between income statement and balance sheet

**Illustration**

Assume retained earnings balance of Royal Corporation at January 1, year 3 to be birr 120,000, net income reported and dividends declared during year 3 is birr 180,000 and birr 60,000 respectively.

**Required; prepare a statement of retained earnings at December 31 year 3**

**Solution;**

**Royal Corporation**  
**Statement of retained earnings**  
**December 31, year 3**

Retained earnings January 1, year 3		120,000
Add net income	180,000	
Less: Dividends	<u>60,000</u>	<u>120,000</u>
Retained earnings, December 31, year 3		<u><b>240,000</b></u>

**C. Balance Sheet**

 **Statement of Stockholder's equity**

The Statement of Stockholder's equity, also called statement of changes in stockholders' equity, summarizes the changes in the components of the stockholders' equity section of the balance sheet. More and more companies are using this statement in place of the statement of retained earnings because it reveals much more about the year's stockholders' equity transactions.

 **Equity (Book value) per share**

The word value is associated with shares of stock in several ways. Par value or stated value is set when the stock is authorized and establishes the legal capital of a company. Neither par value nor stated value has any relationship to a stock's book value or market value. The book value of a company's stock represents the total assets of the company less its liabilities. It is simply the stockholders' equity of a company or company's net assets.

The book value per share, therefore, represents the equity of the owner of one share of stock in the net assets of the corporation

## Formula

$$\text{Equity (book value) Per share} = \frac{\text{Total stockholders equity}}{\text{outstanding shares}}$$

**Note** When there are two classes of stock:-

- 1<sup>st</sup> allocate the total equity between the two classes of stock giving preferential right for preferred shares.
- 2<sup>nd</sup> determine equity per share for each classes of stock

## Illustration

The stock holder's equity sections of Malgarin Corporation are as follows for the year ended December 31, 2007;

### Stockholders Equity

#### Paid in Capital:

Preferred stock, \$ 100 par 6%

200 shares outstanding                      \$20,000

Paid in capital in excess of par                      5, 000      \$25, 000

Common stock, \$5par 100,000

Shares authorized, 10,000 issued                      \$50,000

Paid in capital in excess of par                      15,000      65,000

Paid Capital from treasury    8,000

Total paid in capital    \$98,000

Retained earning    95,000

Total stockholders equity and retained earning    \$193,000

Less: Treasury stock (1000 shares at cost)    15,000

Total stockholders equity    **\$178,000**

Suppose that the preferred stock is entitled to receive \$ 105 per share up on liquidation and a 2 year dividends are in arrears including the current year.

**Required; Compute earnings (book value) per share for each classes of stock.**

**Solution**

Total stockholders equity	\$178,000	
Less; allocated to preferred stock		
Liquidation price (\$105X200shares)	\$21000	
Dividend in arrears (\$6 X 200 shares)	<u>1200</u>	<u>22200</u>
Allocated to preferred stock		<b>\$155,800</b>

#### **Equity per share**

Preferred stock:  $\$ 22,200/200 = \$ 111$  per share

Common stock:  $\$155,800/10,000= \$15.58$  per share

#### **Quick Check 4-3**

1. In computing the shares outstanding;
  - A. Common stock distributable is included
  - B. Treasury stock is included
  - C. Neither A nor B
  - D. Both A and B
2. If a corporation has two classes of stock what considerations are given to preferred stock to allocate the total equity between the classes of stock?

3. Based on the following data for KK Corporation, determine the total stockholders' equity and compute earnings (book value) per share for each classes of stock.

- Preferred stock, \$ 80 par 5%, 2000 shares outstanding
- Paid in capital in excess of par, preferred \$ 40, 000
- Common stock, \$40 Par 100,000 Shares authorized, 20,000 issued
- Paid in capital in excess of par, preferred \$ 30,000
- Paid in Capital from sale of treasury stock, common \$ 8,000
- Retained earning \$ 120,000
- Treasury stock, common (1000 shares at cost)

Suppose that the preferred stock is entitled to receive \$ 100 per share up on liquidation and a 3 year dividends are in arrears including the current year.

## Chapter Review

Identify and explain the management issues related to contributed capital. The management of contributed capital is a critical component in the financing of a corporation, which is a legal entity separate and distinct from its owners. The issues faced by management in the area of contributed capital are forming a corporation managing under the corporate form of business using equity financing determining dividend policies and evaluating performance using return on equity. Define start-up and organization costs and state their effects on financial reporting. The costs of organizing a corporation are recorded as expenses when they are incurred. They increase the initial loss or reduce the initial income of a corporation.

Identify the components of stockholders equity. Stockholders equity consists of contributed capital and retained earnings. Contributed capital includes two basic types of stock common stock and preferred stock. When only one type of security is issued it is common stock. Common stockholders have voting rights they also share in the earnings of the corporation. Retained earnings, the other component of stockholders' equity, represent the claim of stockholders to the assets of the company resulting from profitable operations. These are earnings that have invested in the corporation.

Account for cash dividends. The liability for payment of cash dividends arises on the date of declaration by the board of directors. The declaration is recorded with a debit to cash dividends declared and a credit to cash dividends payable. The date of record on which no entry is required establishes the stockholders who will receive the cash dividend on the date of payment. Payment is recorded with a debit to cash dividends payable and a credit to cash.

Identify the characteristics of preferred stock including the effect on distribution of dividends. Preferred stock like common stock is sold to raise capital. But the investors in

preferred stock have different objectives. To attract such investors, corporations usually give them preference-in terms of receiving dividends and assets-over common stockholders. The dividend on preferred stock is generally figured first; then the remainder goes to common stock. If the preferred stock is cumulative and in arrears, the amount in arrears must be allocated to preferred stockholders before any allocation is made to common stockholders. In addition, certain preferred stock is convertible preferred stock is often callable at the option of the corporation.

Account for the issuance of stock for cash and other assets. A corporation's stock is normally issued for cash and other assets. The majority of states required that stock be issued at a minimum value called legal capital is represented by the par or stated value of the stock

When stock is issued for cash at par or stated value, Cash is debited and common stock or preferred stock is credited. When stock is sold at an amount greater than par or stated value the excess is recorded in paid-in capital in excess of par or stated value. Sometimes stock is issued for non cash assets. Then the account must decide how to value the stock. The general rule is to record the stock at its market value. If this value cannot be determined the fair market value of the assets received is used to record the transaction.

Account for stock Treasury stock is stock that a company has issued and later reacquired but not resold or retired. A company may acquire its own stock to create stock option plans, maintain a favorable market for the stock increase earnings per share or purchase other companies. Treasury stock is similar to unissued stock in that it does not have rights until it is reissued. However, treasury stock can be resold at less than par value without penalty. The accounting treatment for treasury stock is as shown below:

**Treasury stock transaction**

Purchase of treasury stock

Sale of treasury stock at the same

Price as the cost of the shares

Sale of treasury stock at an amount

Greater than the cost of the shares

The cost of the shares and paid-in

Capital treasury stock for the excess.

Sale of treasury stock at an amount

Less than the cost of the shares

**Accounting Treatment**

Debit treasury stock and credit cash

For the cost of the shares

Debit cash and credit treasury stock

for the cost of the shares

Debit cash for the reissue price of the

shares and credit treasury stock for

Debit cash for the reissue price

Debit paid-in capital treasury stock  
does not exist or its balance is not  
large enough to cover the difference

Retained Earnings should absorb the  
difference

## REVIEW OF CONCEPTS AND TERMINOLOGY

**Articles of incorporation** An official document filed with and approved by a state that authorizes the incorporations to do business as a corporation.

**Authorized stock** the maximum number of shares a corporation can issue with out changing its charter with the state.

**Common stock:** Shares of stock that carry voting right but that rank below preferred stock in term of dividends and the distribution of assets.

**Convertible preferred stock:** preferred stock that can be exchanged for common stock at the option of the holder.

**Corporation:** A separate legal entity having its own rights, privileges and liabilities distinct from those of its owners.

**Cumulative preferred stock:** Preferred stock on which unpaid dividends accumulate over time and must be satisfied in any given year before a dividend can be paid to common stockholders.

**Date of declaration:** The date on which the board of directors declares a dividend

**Date of payment:** The date on which payment of a dividend is made

**Date of record:** The date on which ownership of stock for purpose of receiving a dividend is determined.

**Dividends:** The distribution of a corporation's assets (usually cash generated by past earnings) to its stockholders.

**Dividends in arrears:** Pat dividends on cumulative preferred stock that remains unpaid

**Double taxation:** The act of taxing corporate earnings twice-once as the income of the corporation and once as the dividends distributed to stockholders.

**Ex-dividend:** A description of capital stock between the date of record and the date of payment, when the right to a dividend already declared on the stock remains with the person who sells the stock and does not transfer to the person who buys it.

**Initial public offering (IPO):** common stock issue of a company that is selling its stock to the public for the first time.

**Issued stock:** The shares of stock sold or otherwise transferred to stockholders.

**Legal capital:** The number of shares of stock issued times the par value the minimum amount that can be reported as contributed capital.

**Liquidating dividend:** A dividend that exceeds retained earnings usually paid when a corporation goes out of business or reduces its operations.

**No cumulative preferred stock:** Preferred stock that does not oblige the issuer to make up a missed dividend in a subsequent year before paying dividends to common stockholders.

**No-par stock:** Capital stock that not have a par value

**Outstanding stock:** stock that has been issued and is still in circulation.

**Par value:** An arbitrary amount assigned to each share of stock used to determine the legal capital of a corporation.

**Preferred stock:** Stock that has preference over common stock, usually in terms of dividends and the distribution of assets.

**Residual equity:** The common stock of a corporation

**Return on Equity:** A measure of management performance net income divided by average stockholders' equity.

**Share of stock:** A unit of ownership in a corporation

**Star-up and organization costs:** The costs of forming a corporation

**Stated value:**a value assigned by the board of directors of a corporation to no-parstock.

**Stock certificate:** A document issued to a stockholder indicating the number of shares of stock the stockholder owns.

**Stock option plan:** An agreement to issue stock to employees according to specified terms

**Treasury stock:** Capital stock either common or preferred that has been issued and required by the issuing company but that has not subsequently been resold or retired.

## Answers to Quick Checks

### Quick check 4-1

1. C
2. D
3. C

### Quick check 4-2

1.	Year	prepared dividend	common dividend	combined
a)	2005	—	—	—
	2006	80,000	—	80,000
	2007	90,000	650,000	155,000
b)	2005	—	—	—
	2006	80,000	—	80,000
	2007	100,000	55,000	155,000

### 2. a) Preferred dividend

$$\$4 \times 10,000 = \$40,000$$

Common dividend

$$\$180,000 - \$40,000 = \$140,000$$

### b) Preferred dividend

$$\$40,000 + \$2 \times 10,000 = \$60,000$$

Common dividend

$$\$80,000 + \$2 \times 20,000 = \$120,000$$

### 3. a) March 12, 2007 Cash 10,000,000

Common stock 10,000,000

March 25, 2007 Treasury stock common 1,100,000

Cash 1,100,000

### b) No of shares outstanding

100,000 shares outstanding- 10,000 treasury share

= 990,000 shares

4. a)	Cash (300x110)	33000	
	Treasury stock		33000
b)	Cash (250x130)	31500	
	Treasury stock (250x110)		27500
	Paid in capital in excess of par		4000
c)	Cash (450x 90)	40500	
	Paid in capital in excess	4000	
	Retained earnings	5000	
	Treasury stock (450x110)		49500

#### Quick check 4-3

1. D

2. Liquidation price per share and Dividend in arrears if any

3. Stock holder's equity paid in capital

- Preferred stock \$80 par 5%		
2000 shares outstanding	\$160,000	
- Paid in capital in excess of par	<u>40,000</u>	200,000
- Common stock \$40 par 20,000		
Shares issued	\$800,000	
- Paid in capital in		
Excess of par	<u>30,000</u>	830,000
Paid in capital from treasury		<u>8000</u>
Total paid in capital		1,038,000
Retained earnings		<u>120,000</u>
Total stock holder's equity & Retained earnings		1,158,000
Less: treasury stock (1000 shares at cost)		<u>40,000</u>

Total stockholders equity		\$1,118,000
Total stockholders'		\$1,118,000
Allocated to preferred stock		
Liquidation price (\$ 100 X2000)	\$200,000	
Dividend in arrears (\$ 4 X3 X 2000)	<u>240,000</u>	<u>240,000</u>
Allocated to common stock		\$ 894,000

Equity per share

Preferred stock: \$ 224,000/2000 = \$112 per share

Common stock: \$ 894,000/ 20,000= \$ 44.7 per share

**Review Questions**

1. Of the following statements which are true for the corporate from organization?
  - a. It is a separate legal entity.
  - b. Ownership rights can not be easily transferred.
  - c. owners are not agents of the corporation
  - d. Capital is more easily accumulated than with most other forms of organization
  - e. It has a limited life
  - f. Owners have unlimited liability for corporate debts.
  - g. Distributed income is usually taxed twice.

2. Each of these entries is recorded by a different corporation. Provide an explanation for the transaction described by entry.

1. April 1	Cash .....	70,000
	Common stock No-par value.....	70,000
2. April 1	Organization costs .....	130,000

	Common stock No-par value.....	86,000
	Contributed capital in excess of stated	
	Value common stock .....	44,000
3. April 1	Merchandise inventory .....	105,000
	Machinery .....	145,000
	Notes payable .....	154,000
	Common stock, \$25par value .....	50,000
	Contributed capital in excess of	
	Par value, common stock.....	46,000

3. On March 1, DVD corporation issues 42,500 shares of \$4 par value common stock for \$297,500 cash prepare the entry to record this transaction.

4. Prepare journal entries to record the following transactions for Delta Corporation

May 15 declared a \$54,000 cash dividend payable to common stockholders.

May 31 paid the dividend declared on may 15.

5. The stockholders' equity section of Aurora Company's balance sheet follows

Preferred stock, 5% cumulative \$10 par value

20,000 shares authorized issued and outstanding .....\$200,000

Common stock \$5 par value 200,000 shares

Authorized, 150,000 shares issued and outstanding .....750,000

Retained earnings .....890,000

Total stockholders' equity ..... \$1,840,000

Prepare journal entries record the following four separate issuances of stock

a. Two thousand shares of no-par common stock are issued to the corporation's promoters in exchange for their efforts, estimated to be worth \$40,000. The stock has no stated value.

- b. Two thousand shares of no-par common stock are issued to the corporation's promoters in exchange for their efforts, estimated to be worth \$40,000. The stock has a \$1 per share stated value.
- c. Four thousand shares of \$5 par value common stock are issued for \$35,000 cash.
- d. One thousand shares of \$50 par value preferred stock are issued for \$60,000 cash.

6. Match each description/ through 6 with the characteristic of preferred stock that it best describes by writing the letter of the characteristic in the blank next to each description.

- a) Callable
- b) Convertible
- c) Cumulative
- d) No cumulative
- e) Nonparticipating
- f) Participating

- \_\_\_ 1 Holders of the stock are not entitled to receive dividends in excess of the stated rate
- \_\_\_ 2. Holders of the stock lose any dividends that are not declared.
- \_\_\_ 3. Holders of the stock are entitled to receive current and all past dividends before common stockholders receive any dividends
- \_\_\_ 4. Holders of this stock can exchange it for shares of common stock.
- \_\_\_ 5. The issuing corporation can retire the stock by paying a pre specified price.
- \_\_\_ 6. Holders of the stock can receive dividends in excess of the stated rate under certain conditions.

7. Citicorp's outstanding stock includes (a) 80,000 shares of no cumulative 7.5% preferred stock with a \$5 par value and (b) 200,000 shares of common stock with a \$1 par value. During its first four years of operation, the corporation declared and paid following dividends:

2002.....	\$20,000
2003.....	28, 000
2004.....	200,000
2005.....	350,000

Determine the amount of dividends paid each year to each of the two classes of stockholders. Also compute the total dividends paid to each class for the four years combined.

8. Use the data in exercise 7 to determine the amount of dividends paid year to each of the two classes of stockholders assuming that the preferred stock is cumulative. Also determine the total dividends paid to each class for the four years combined.

On October 10, the stockholders' equity of Perry systems consists of the following:

Common tock-\$10 par value, 72,000 share	
Authorized issued, and outstanding .....	\$720,000
Contributed capital in excess of par value, common stock.....	216, 000
Total contributed capital .....	\$936,000
Retained earnings .....	864, 000
Total stockholders' equity .....	\$1,800,000

- I. Prepare journal entries to record the following transaction for Perry systems
  - a) Purchased 5,000 shares of its own common stock at \$25 per share on October 11
  - b) Sold 1,000 treasury shares no November1 for \$20 cash per share
  - c) Sold all remaining treasury shares on November 25 for \$20 cash per share
- II. Explain how Perry's equity section after the October 11 treasury stock purchase.

The equity section tabak corporation's balance sheet shows the following

Preferred stock, 6% cumulative \$25 par value \$30 call	
Price 10,000 shares issued and outstanding .....	\$250,000
Common stock, \$10 par value 80,000 shares	
Issued and outstanding .....	800,000
Retained earnings .....	535,000
Total stockholders equity .....	\$1,585,000

Determine the book value per share of the preferred an common stock under two separate situations

- i. No preferred dividends are arrears
- ii. Three years of preferred dividends are in arrears

## Answer Key for Chapter One

### Multiple choices

1. b. Items to be expensed are those that do not benefit future periods. Repair of damage occurring during installation has no future value and should be expensed currently. The other items are all ordinary and necessary to acquire equipment and are appropriately considered to be part of an asset's cost.

2. b. br152,000 and br275,000. The br152,000 consists of br150,000 site cost and br2,000 legal fees. The br275,000 amount equals the architect's fees and construction costs.

3. b. br4,500,000. The land represents 30% of the package ( $\text{br}6,000,000 / (\text{br}6,000,000 + \text{br}12,000,000 + \text{br}2,000,000)$ ). The br15,000,000 purchase price times 30% equals the br4,500,000 assigned cost.

4. b. 20X1 depreciation =  $\text{br}100,000 \times 40\% = \text{br}40,000$

20X2 depreciation =  $\text{br}60,000 \times 40\% = \text{br}24,000$

20X3 depreciation =  $\text{br}36,000 \times 40\% = \text{br}14,400$

20X4 depreciation =  $\text{br}21,600 \times 40\% = \text{br}8,640$

However, 20X4 depreciation is limited to the amount to reduce net book value to the br20,000 salvage value; therefore, 20X4 depreciation is only br1,600.

5. c. br5,600. The book value equals cost (br20,000) minus accumulated depreciation (br14,400). The accumulated depreciation is calculated as follows:

20X1  $\frac{4}{10} \times (\text{br}20,000 - \text{br}4,000) = \text{br} 6,400$

20X2  $\frac{3}{10} \times (\text{br}20,000 - \text{br}4,000) = 4,800$

20X3  $\frac{2}{10} \times (\text{br}20,000 - \text{br}4,000) = 3,200$

$\text{br}6,400 + \text{br}4,800 + \text{br}3,200 = \text{br}14,400$

6. b. br8,291. 20X2 depreciation is calculated as follows:

$$10/55 \times 1/2 \times \text{br}48,000 = \text{br}4,363.64$$

$$9/55 \times 1/2 \times \text{br}48,000 = 3,927.27$$

$$\text{br}4,363.64 + \text{br}3,927.27 = \text{br}8,290.91$$

7. a. If a plant asset is acquired or retired on the first half of the month, it is treated as on the first day of the month

**Answer Key: Problem 1 Depreciation Expense, 2006 = br10,000 (straight-line).**

**Answer Key: Problem 2 Depreciation Expense, 2004 = br1,231 (200% declining-balance).**

## Answer Key For Chapter Two

### Problem 4

#### Arba Minch University Payroll Register (sheet) For the month of Yekatit, 2000

No.	Name of Employee	Earnings			Gross Earnings	Deductions			Total Dedu.	Net Pay
		Basic Salary	Allowance	Over Time		Income Tax	Pension Contribution	Other Dedu.		
01	<b>Sindu Shewaye</b>	730	200	22.81	952.81	65.42	29.2	-	94.62	858.19
02	<b>Sisay Eshetu</b>	1020	-	102	1122.00	120.8	40.8	300	461.60	560.40
03	<b>Tensay Alebachew</b>	5300	-	-	5300.00	1192.5	212	-	1404.5	3895.5
04	<b>Taye Muluken</b>	1470	-	-	1470.00	176.6	-		176.60	1293.40
05	<b>Tefefe Ejeta</b>	950	-	89.06	1039.06	108.35	-		108.35	930.71
<b>Totals</b>		<b>9470</b>	<b>200</b>	<b>213.87</b>	<b>9883.87</b>	<b>1663.57</b>	<b>282</b>	<b>300</b>	<b>2245.57</b>	<b>7638.3</b>

#### Journal Entries

1. Recording the payment of Salary

Yekatit 30. Salary Expense .....	9883.87
Cash .....	638.30
Pension Payable .....	282.00
Employee Income tax Payable	1663.57
Credit Association Payable	300.00

Also, on this same date, the agency (as an employer) has to contribute 6% of the basic salary of every permanent employee to the government pension trust fund.

Therefore,

Total basic salary of permanent employees X 6%

$$= (5300 + 1020 + 730) \times 6\% = \underline{423}$$

The following journal entry, therefore, is recorded on Yekatit 30, 2000

Pension cont. Expense .....	423
Pension contribution payable .....	423
3. Recording the payment of deduction from Paulos' salary to the credit association:	
Megabit 1, Payable to credit Ass. ....	300
Cash .....	300
4. Recording the payment of employees' income tax withheld and the 10% pension contribution to the relevant government body:	
Megabit 7, Dr. Pension cont. Payable .....	705
Dr. Emp. Income tax payable .....	1663.57
Cr. Cash .....	2368.57

## Answer Key for Chapter Three

### Multiple choice

- 1) a
- 2) a
- 3) c

### Problem

1

A realization of land

Cash	50,000	
Land		40,000
Gain on realization		10,000

B Division of gain

Gain on realization	10,000	
Peter capital		5000
Mary capital		5000

C Payment of liability

Accounts payable	20,000	
Cash		20,000

D distribution of cash

Peter capital	35000	
Mary capital	25000	
Cash		60,000

2

D Sale of inventory

Cash	250,000	
Loss on realization	287,200	
Inventory		537,000

**Allocation of loss on realization**

Quick capital	143600	
Drake capital	95733	
Sage capital	47867	
Loss on realization		287200

**Payment of liability**

Accounts payable	245,500	
Cash		245,200

**Division of Quick's capital deficient between Drake and Sage**

Drake capital	33,733	
Sage capital	16,867	
Quick capital		50,600

**Distribution of cash**

Drake capital	83,034	
Sage capital	102,266	
Cash		185,300

## Answer Key for Chapter Four

### Multiple choices

1 a , c

3	Cash	297500	
	Common stock		170,000
	Paid in capital in		127,500

4 May 15

Cash dividends declared		54,000	
	Cash dividends payable		54,000

May 31

Cash dividends payable		54,000	
	Cash		54,000

6 1, E    2, D    3, C    4, B    5,A    6, F

7. <u>Year</u>	<u>Preferred dividend</u>	<u>Common dividend</u>
2002	\$20,000	—
2003	28,000	—
2004	200,000	—
2005	300,000	\$50,000

8. <u>Year</u>	<u>Preferred dividend</u>	<u>Common dividend</u>
2002	\$20,000	—
2003	28,000	—
2004	200,000	—
2005	350,000	—



## REFERENCE

1. Fees and Warren: Principles of Accounting, 16th edition, South-Western Publishing Company.
2. Lewis D. Boynton Paul A. Carlsons Hamden L. Forkner, and Robert M.Swanson: 20<sup>th</sup> Century Bookkeeping and Accounting, 23<sup>rd</sup> Edition, (1967), South – Western Publishing Company, Cincinnati Ohio.
3. Kermit d. Larson, Fundamentals of Accounting principles, 12th Ed, USA.
4. Meigs and Meigs, Accounting: The basic for business decisions, 3-8th Ed. USA
5. Keith and Stephens, Accounting principles, 2nd, 1986, USA.
6. Harman son, Edwards & Maher Accounting principles, 5th Ed, 1992, USA
7. Larson Wild. Chiappetta , Fundamental Accounting Principles , 16 th ed McGraw-Hill/Irwin2002
8. Needles , Power , Crosso Principles of accounting USA 2002

**ARBA MINCH UNIVERSITY**  
**FACULTY OF BUSINESS & ECONOMICS**  
**DEPARTMENT OF ACCOUNTING& FINANCE**

**Assessment and tutorial classes unit**

1. Student's Name \_\_\_\_\_
2. Id No \_\_\_\_\_
3. Program \_\_\_\_\_
4. course Title and Code \_\_\_\_\_
5. Town (City) \_\_\_\_\_
6. Points number : \_\_\_\_\_
7. Tutor's Name and signature \_\_\_\_\_

**Tutor marked Assignment for: Principles of Accounting II**

This is a tutor marked assignment you are expected to do on your own. It contains **30 points**. The tutor marked assignment should be completed and submitted to Arab Minch University distance education coordination office for evaluation.

Do not try to complete the assignment until you have covered all the lesson and exercises in the course material.

Any questions in the course that you have not been able to understand should be stated on a separate sheet of paper and attached to this assignment. Your tutor will clarify them for you.

After completing this assignment, be certain to write your **Name, Id No. and address on the first page.**

## **Assignment**

### **Part I : Discussing Question (Discuss Briefly)**

1. Distinguish between an addition to plant assets and betterment.
2. Explain the meaning of depreciation
3. Describe in detail the major characteristics of plant (fixed) assets.
4. Briefly describe the factors that affect the computation of depreciation.
5. Describe the objectives of payroll system?
6. Identify and briefly describe the components of payroll register?
7. What is the main difference between pension contribution and provident fund contribution?
8. What does the term mutual agency mean when applied to a partnership?
9. What does the term unlimited mean when it is applied to partnership members?
10. How does a general partnership differ from a limited partnership?
11. List the general rights of common stockholders.
12. Identify and explain the importance of the three dates relevant to corporate dividends
13. What is the difference between a stock dividend and a stock split?
14. How does the purchase of treasury stock affect the purchase's assets and total stockholders' equity?
15. After all partnership assets have been converted to cash and all liabilities paid, the remaining cash should equal the sum of the balance of the partners' capital accounts. Why?
16. Assume a partner withdraws from a partnership and receives assets of greater value than the book value of his equity. Should the remaining partners share the resulting reduction in their equities in the ratio of their relative capital balances or according to their income-and-loss-sharing ratio?

## Part II : Multiple choices

1. Which of the following expenditures incurred in connection with the acquisition of equipment is not a proper charge to the asset account?
  - A) Freight or transportation costs.
  - B) Cost of test runs to ready the machine for operation
  - C) Taxes and tariffs
  - D) Cost of vandalism
  - E) B and D
2. If the Double-declining depreciations rate of a plant asset is 50%, then its estimated life will be:
  - A) 50 years.
  - B) 10 years
  - C) 5 years
  - D) 4 years
  - E) None of the above
3. Which of the following methods will yield the highest depreciation expense during the first year of an asset's life?
  - A) Straight line method
  - B) Sum-of-years-digits method
  - C) Double-declining balance method
  - D) All of the above
  - E) None of the above
4. If the adjusting entry to record depreciation expense was overlooked, then:
  - A) Total assets will be understated
  - B) Liabilities would be overstated
  - C) Owner's capital would be overstated
  - D) Net income would be overstated
  - E) C and D
5. One of the following is not an example of intangible assets.
  - A) patents
  - B) Franchise
  - C) Trademarks
  - D) Organization cost
  - E) None

### **Part III: Work out Questions**

1. Discarded office equipments for which there was no further use and which could not be sold. The office equipment cost Br. 160.000 and had a book value of Br. 20.000 at the time was discarded.
  
2. On October 5, 2001, NOON C. acquired a new machine at a cost of Birr 250,000. the machine has a useful life of 5 years and scrape value of Br. 10,000. it is estimated that the equipment will produce 2,000,000 units of products throughout its life. The equipment produced 95,000 units and 300,000 units of products during the fiscal periods ending December 31, 2001 and December 31,2001 respectively. On the basis of the above date, compute depreciation expense to be recorded on Dec. 31, 2002.
  - a) Under the units of production method.
  - b) Under the declining-balance method.
  - c) Under the sum-of-years-digits method
  - d) Under the straight-line method.
  
3. A permanent employee of a governmental organization with a basic monthly salary of Birr 640 and monthly allowance of Birr 100 has worked 20 overtime hours during days in the weekends of the current month. This employee usually works 160 hours in a month to earn his basic salary.

#### **Required**

Based on the above information calculate

- a. The ordinary hourly rate of the employee
- b. The Gross earning of the employee
- c. The amount of employee income tax and pension contribution deductions.

4. Ann martin and Susie Mmeyer are partners in a a business they started two years ago. The partnership agreement states that Ann should receive a salary allowance of \$15,000 and that Susie should receive a \$20,000 salary allowance. Any remaining income or loss is to be shared equally. Determine each partner's share of the current year's net income of \$52,000
  
5. Tomm agree to pay Lennox and Bradley \$10,000 each for a one-third ( $\frac{1}{3}$ ) interest in the Lennox and Bradley partnership. When Tomm is admitted, each partner has a \$30,000 capital balance. Make the journal entry to record Tomm's purchase of the partners' interest.
  
6. Goering gore and Schmit are partners with capital as follows: Goering, \$168,000 Gore, \$138,000; and Schmit, \$294,000. The partners share income and loss in a 3:2:5 ratios. Gore decides to withdraw from the partnership, and the partners agree to have the assets revalued upon his retirement prepare journal entries to record gore's February 1 withdrawal from the partnership under each of the following separate assumptions: Gore (a) sells his interest to Getz for \$160,000 after Goring and Schimt approve the entry of Getz as a partner; (b) gives his interest to a son-in-law Swanson, and thereafter goering and Schmit accept Swanson as a partner; (c) is paid \$138,000 in partnership cash for his equity (d) is paid \$14,000 in partnership cash for his equity (e) is paid \$30,000 in partnership cash plus equipment recorded on the partnership books at \$70,000 less its accumulated depreciation of \$23,200.

7. Arba Minch Rehabilitation center pays the salary of its employees according to the Ethiopian calendar month. The forthcoming data relates to the month of Hidar 1994.

Ser No	Name of Employee	Basic salary	Monthly Allowance	OT hours worked	Duration of OT work
01	Senait Bahiru	3,200	200	10	Up to 10p.m
02	Petros Chala	1,280	-	8	10 p.m to 5a.m
03	Tesgaye Tadele	1,600	-	6	weekly rest days
04	Leilla Jemal	1,440	100	-	-
05	Kirkos Wolde	960	100	10	public rest days

The management of the agency usually expects a worker to work 40 hours in a week and during Hidar 1994 all workers have done as they have been expected.

Besides, all workers of this agency are permanent employees except Petros Chala; the monthly allowance of Kirkos Wolde is for transportation; Tesgaye Tadele agreed to have a monthly Birr 200 be deducted and paid to the Credit Association of the agency as a monthly saving.

**Required:**

- i. Prepare a payroll register (or sheet) for the agency for the month of Hidar, 1994.
- ii. Record the payment of salary as of Hidar 30, 1994.
- iii. Record the payroll tax (pension contributed by the agency) for the month of Hidar.
- iv. Record the payment of the claim of the Credit Association of the agency that arose from Hidar's payroll assuming that payment was made on Tahesase 1.
- v. Record the payment of withholdings and payroll taxes on Tahesase 4.

8. Laman, Hinson and Roney who share income and loss in a 2:1:2 ratio, plan to liquidate their partnership. At liquidation, their balance sheet appears as follows:

**Laman Hinson, and Roney**

**Balance sheet**

**January 18**

<b>Assets</b>	<b>Liabilities and equity</b>
Cash .....\$348,600	Accounts payable .....\$342,600
Equipment .....617,200	Laman, capital.....300,400
	Hinson, capital .....195,800
	Roney, capital .....127,000
Total assets .....\$965,800	Total liabilities and equity....\$965,800

**Required**

Prepare journal entries for the sale of equipment, the allocation of its gain or loss, and the distribution of cash in each of the following separate causes equipment is sold for (1) \$650,000 (2) \$530,000 (3) \$200,000 and any partners with capital deficits pay in the amount of their deficits; and (4) \$150,000 and the partners have no assets other than those invested in the partnership.

9. Unocol corp. reports the following components of stockholder's equity on December 31,2001:

Common stock \$1 par value 320,000 shares authorized	
200,000 shares issued and outstanding .....	\$200,000
Contributed capital in excess of par value common stock.....	1,400,000
Retained earnings.....	2,160,000
Total stockholder's equity .....	\$3,760,000

It completes the following transactions related to stockholder's equity in year 2002:

Jan. 10 Purchased 40,000 shares of its own stock at \$12 per share

Mar. 2 Directors declared a \$1.50 per share cash dividend payable on March 31 to the March 15 stockholders of record.

Mar. 31 paid the dividend declared on March 2.

Nov. 11 Sold 24,000 of the treasury shares at \$13 per share

Nov 15 directors declared a \$2.50 per share cash dividend payable on January 2, 2003, to the December 10 stockholders of record.

Dec. 31 closed the \$1,072,000 credit balance (from net income) in the income summary account to retained earnings.

**Required**

- a. Prepare journal entries to record the transactions and closing for 2002.
- b. Prepare a statement of retained earnings for the year ended December 31, 2002.
- c. Prepare the stockholder's equity section of the company's balance sheet as of December 31, 2002.