Chapter – 01

Accounting in Action

Lecture-01: **21 November, 2021**

What is Accounting?

Accounting is the language of business. It is an information system that **identifies, records** and **communicates** the economic events of an organization to interested users.

Business Enterprises

Types of business enterprises:

1. **Proprietorship**
    a. Owned by one person
2. **Partnership**
    a. Owned by two or more persons (**2-20**)
3. **Corporation**
    a. Organized as a separate legal entity under state corporation law and having ownership divided into transferable shares of stock. (**1994 companies act**)

Lecture-02: **23 November, 2021**

Types of accounting:

1. **Financial Accounting**:

   Financial accounting is the process of identifying, recording, classifying, summarizing, and preparing financial statements (income statement, owner's equity statement and balanced sheet) and interpreting the results from the business transactions.
   Financial accounting is based on past.

2. **Cost Accounting**:

   Cost accounting is responsible for calculation and control of the cost of production. It is applied only for the manufacturing companies (pharma, textile etc.).

3. **Management Accounting**:

   Management accounting is that accounting which provides necessary accounting information to the management authority for taking better decisions for the business organizations.

Chapter-02

Cost Terms & Cost Classification

Cost Sheet:

Particulars		Tk	Total Tk
	Beginning inventory of raw materials	xxx	
(+)	purchase of raw materials	xxx	
	Raw materials available for production	xxx	
(-)	Ending inventory of raw materials	xxx	
	* Raw materials used / consumed		xxxx
Add:	Direct Labor Cost (DLC)		xxxx
	* Prime cost		xxxx
Add:	Manufacturing overhead		xxxx
	Total manufacturing cost		xxxx
Add:	Beginning inventory of W-I-P		xxxx
			xxxx
Less:	Ending inventory of W-I-P		xxxx
	* Cost of goods manufactured		xxxx

RM = Raw Materials

DLC = Direct Labor Cost

PC = Prime Cost

W-I-P = Work In Process

RM + DLC = PC

Overhead - Indirect Cost (not directly related but supports)

Overhead is of two types:

1. **Manufacturing**
2. **Non-manufacturing**
    a. **Office and administrative**
    b. **Sales**

Lecture-03: **05 December, 2021**

Cost is of two type:

- **Product Cost**
  - Direct material cost, direct labor cost, manufacturing overhead
- **Period Cost**
  - // ask teacher

N.B. Manufacturing over head includes all sorts of indirect costs and costs in factory.

Cost (Sheet) of Goods Sold:

Particulars	Tk
Beginning finished goods.....	xxx
Add: cost of goods manufactured.....	xxx
Goods available for sale.....	xxx
Deduct: Ending finished goods.....	xxx
Cost of goods sold.....	xxx

Exercise 2-11:

(1)

Mason Company

Schedule of cost of goods manufactured

Particulars	£	Total £
Direct Materials:		
Raw materials inventory, beginning……..	7000	
Add: Purchase of raw materials……	118000	
Raw materials available for use……	125000	
Deduct: Raw materials inventory, ending…….	15000	
Raw materials used in production……		110000
Direct Labor……..		70000
Manufacturing Overhead:		
Indirect labor……..	30000	
Maintenance, factory equipment……	6000	
Insurance, Factory equipment……..	800	
Rent, Factory facilities……..	20000	
Supplies……..	4200	
Depreciation, factory equipment……	19000	
Total Overhead Cost……		80000
Total Manufacturing Cost……		260000
Add: Work in progress, beginning……		10000
		270000
Deduct: Work in progress, ending……		5000
Cost of goods manufactured……		265000

(2)

Mason Company

Schedule of Cost of Goods Sold

Finished goods inventory, beginning	20,000
Add: Cost of goods manufactured	265,000
Goods available for sale	285,000
Deduct: Finished goods inventory, ending	35,000
Cost of goods sold	250,000

(3)

Mason Company

Income Statement

Sales revenue	xxx
Deduct: Cost of goods sold	xxx
Gross profit	xxx
Deduct: Selling expenses	xxx
	xxx
Deduct: Administrative expenses	xxx
Net income	xxx

Lecture-04: **07 December, 2021**

Chapter – 5

Cost Behavior: Analysis and Use

Types of fixed cost:

1. Committed fixed cost
2. Discretionary fixed cost

Question: Is labor a variable cost or fixed cost?

Topics to be learnt:

- Fixed cost and relevant range
- Mixed cost = fixed cost + variable cost

The cost equation:

$$\boldsymbol{Y = a + bX}$$

Here,

$\boldsymbol{Y}$ = The total mixed cost

$\boldsymbol{a}$ = The total fixed cost

$\boldsymbol{b}$ = Variable cost per unit of activity

$\boldsymbol{X}$ = The level of activity

Methods of finding variable cost:

1. **The High-Low Method**
   Variable Cost = slope of the line = $\frac{\boldsymbol{Rise}}{\boldsymbol{Run}} = \frac{\boldsymbol{Y_2 - Y_1}}{\boldsymbol{X_2 - X_1}} = \frac{\boldsymbol{Change\ in\ cost}}{\boldsymbol{Change\ in\ activity}}$
2. **The least – squares Regression Method**

Study:

Review Problem-2 (Page No 245 [pdf])

Exercise 5-3 (Page No 248 [pdf])

1.

	Occupancy Day	Electrical Cost
High Activity Level (August)	2406	5184
Low Activity Level (October)	124	1588
Change	2282	3560

Variable Cost = Change in cost / Change in activity
= 1.56 USD per occupancy day

	USD
Total Cost (August)	5184
Variable Cost Element:	
(1.56 USD per occupancy-day * 2406 Occupancy-days)	3753
Fixed Cost Element	1395

2.

Electrical costs may reflect seasonal factors other than just the variation in occupancy days. For example, common area, such as the reception area must be lighted for longer periods during the winter than in the summer. This will result in seasonal fluctuations in the fixed electrical costs.

Additionally, fixed costs will be affected by the number of days in a month. In other words, costs like the costs of lighting common areas are variable with respect to number of days in a month, but are fixed with respect to how many rooms are occupied during the month.

Other, less systematic, factors may also affect electrical costs such as the frugality of individual guests. Some guests will turn off lights when they leave a room. Others will not.

Exercise 5-6

	Units Shipped	Shipping Expenses
High activity level (June)	8	2700
Low activity level (July)	2	1200
Change	6	1500

Variable Cost = Change in cost / Change in activity

= 250 units shipped per unit

	USD
Total cost (June)	2700
Variable Element:	
(250 USD per unit shipped * 8 units)	2000
Fixed Cost element	700

More Exercises: Exercise 5-7 and other related exercises.

EXERCISE 5–7 Cost Behavior; High-Low Method [LO1, LO3]

Hoi Chong Transport, Ltd., operates a fleet of delivery trucks in Singapore. The company has determined that if a truck is driven 105,000 kilometers during a year, the average operating cost is 11.4 cents per kilometer. If a truck is driven only 70,000 kilometers during a year, the average operating cost increases to 13.4 cents per kilometer. (The Singapore dollar is the currency used in Singapore.)

Required:

1. Using the high-low method, estimate the variable and fixed cost elements of the annual cost of the truck operation.
2. Express the variable and fixed costs in the form $Y = a + bX$.
3. If a truck were driven 80,000 kilometers during a year, what total cost would you expect to be incurred?

Solution:

Exercise 5-7 (20 minutes)

1.

	Kilometers Driven	*Total Annual Cost**
High level of activity	105,000	$11,970
Low level of activity	70,000	9,380
Change	35,000	$ 2,590

105,000 kilometers × $0.114 per kilometer = $11,970
70,000 kilometers × $0.134 per kilometer = $9,380

Variable cost per kilometer:

$$\frac{\text{Change in cost}}{\text{Change in activity}} = \frac{\$2,590}{35,000 \text{ kilometers}} = \$0.074 \text{ per kilometer}$$

Fixed cost per year:

Total cost at 105,000 kilometers	$11,970
Less variable portion:	
105,000 kilometers × $0.074 per kilometer	7,770
Fixed cost per year	$ 4,200

2. Y = $4,200 + $0.074X

3.

Fixed cost	$ 4,200
Variable cost:	
80,000 kilometers × $0.074 per kilometer	5,920
Total annual cost	$10,120