Chapter-2

Cost terms, Concepts and Classification

Cost and Expenses:

The amount of money which is incurred or paid for present or future benefit is called expenses. Such as wages expenses salary Expenses, Rent Expenses etc.

On the other hand the total amount of inputable expenses which is incurred for particular production or production process is called cost such as Material cost, prime cost, Factory cost etc.

Elements of cost:

Following are the various element of cost-

1) Material – Direct

Indirect

2) Labour/Wages- Direct

Indirect

- 3) Overhead:
- Manufacturing/Factory overhead
- Office and administrative overhead
- Selling and Distribution overhead

** Summary of cost classification:

	Purpose of cost classification	Cost classification
1)	Preparing external financial statements	Product Costs:
	•	Direct Material
	•	Direct Labour
	•	Manufacturing overhead
		Non manufacturing cost-
	•	Marketing/Selling cost
	•	Administrative costs
2)	Predicting Cost behavior in response to •	Variable Cost
	changes in activity •	Fixed Cost

	•	Semi-variable cost
3)	Assigning Costs to costs objects •	Direct Cost
	•	Indirect Cost
4)	Making Decision •	Differential Cost
	•	Sunk Cost
	•	Opportunity Cost

Income Statement

For the year ended Dec-31, 20---

	Tk.	Tk.	Tk.
Sales		***	
Less: Returns & Allowances		***	
Net Sales			***
Less: Cost of goods sold (from cost			***
statement)			
Gross Margin on Sales			***
Less: Operating Expenses			
Marketing Expenses		***	
Administrative Expenses		***	***
Operating Income			***
Add: Non Operating Income:			
Capital gain on sale of Fixed Assets	***		
Royalties & Dividend Received	***		
Interest earned	***		
Discount on purchase (Cash)	***	***	
Less: Non Operating Expenses			
Interest Expenses	***		

Other Non-Operating Expenses	***	***	***
Net Income (Before Tax)			***
Less Tax			***
Net Income (After Tax)			***

Form-1
Statement of Cost of Goods Manufactured and sold

For the year ended December 31, 20----

		Tk.	Tk.	Tk.
1.	1)Direct Materials Consumed/Used:			
	Opening stock of Raw Materials		***	
	Add: Purchase of Raw Material	***		
	Freight in/Carriage Inward	***		

	Less: Purchase Returns, Trade Discount			
	and allowances	***		

	Materials Available for use		***	
	Less: Closing Stock of Raw Materials		***	
	Direct Material Consumed/Used			***
2.	2)Direct Labour:			***
3.	3)Direct Expenses (in any):			***
	(A) Prime Cost (1+2+3)			****
4.	Add Factory Overhead/Manufacturing			
	Overhead:			
	Indirect Material, Indirect Labour,		***	
	Indirect Expenses			
	Heat, Light, Power, Coal, CoKe Payroll		***	

taxes		
Factory Supplies, Depreciation	***	
Factory Properties, Insurance Premium	***	
Or Factory Properties, Repairs &	***	
Maintenance		
Factory Rent. Amortization of Patent.	***	
Tools and die used. Royality.		

Testing Expenses, All other Indirect	***	
Expenses		
Relating to production or manufacture of	***	
goods		
Total Factory/Manufacturing expenses		****
B) Factory cost		****
Add. Beginning Work in process		****
Less Ending Work in Process		****
C) Cost of goods manufactured		****
Add. Beginning Finished goods		****
Less Ending Finished goods		****
D) Cost of goods sold		****

Problems

Problem 2.1

Nord Manufacturing Company recorded the following data during 2019:

Raw materials purchased \$ 360,000

Inventories- January 1,2019:

Raw materials \$ 70,000

Work in Process 240,000

Finished goods 60,000

Direct labor cost 1260,000

Manufacturing overhead (80% fixed) 900,000

Selling expenses (all fixed) 600,000

Administrative expenses (all fixed) 462,000

Sales 7500 units as \$650 per unit

Inventories- December 31, 2019

Raw materials \$62,000

Work in process 220,000

Finished goods 58,000

Required:

- A. Prepare a cost of goods manufactured statement for 2019
- B. What is the firm's net income for 2019?
- C. Divide the manufacturing cost for 2019 into their variable and fixed components.

Nord Mfg. Co

Cost of goods Manufactured statement

For the year ended 31st dec. 2019

Particulars	\$	\$
1) Raw material consumed		
Opening R/M	70,000	
+ Purchase of R/M	3,60,000	
	4,30,000	
Less Ending R/M	<u>62,000</u>	3,68,000
2) Direct labour		<u>12,60,000</u>
3) Prime cost (1+2)		16,28,000
Add Factory O/H		9,00,000
B) Factory cost		2528,000
Add opening W-I-P		2,40,000
Less closing W-I-P		<u>2,20,000</u>
C) Cost of goods manufactured		25,48,000
Add opening finished goods		60,000
Less closing Finished goods		<u>58,000</u>
D) Cost of goods sold		25,50,000
Add Operating expenses:		
Administrative expenses	4,62,000	
Selling expanses	6,00,000	10,62,000
E) Total cost of sales		36,12,000
Add Profit (48,75,000-36,12,000)		12,63,000
F) Total sales		4875,000

Req. B.) Nord mfg. co.

Income statement

For the year ended 31st dec. 2019

particulars	\$	\$
Sales		4875,000
Less cost of goods sold		<u>25,50,000</u>
Gross margin		23,25,000
Less Operating expenses:		
Marketing exp.	6,00,000	
Administrative Exp.	4,62,000	<u>1062,000</u>
Net income		12,63,000
		=====

Fixed Mfg. O/H $(9,00,000 \times 80\%)$ = \$7,20,000 Variable mfg. O/H $(9,00,000 \times 20\%)$ =\$ 180,000

Problem 2.2

Indirect labor

Marwick Company recorded the following data during 2019:

Sales	\$ 620,000
Raw materials purchased	72,000
Selling and administrative expenses	96,000
Direct labor	118,000
Beginning raw materials inventory	18,000
Ending raw materials inventory	15,000
Plant depreciation	112,000
Plant utilities	6,500

8,800

Insurance plant 3,000

Beginning work in process inventory 57,000

Ending work in process inventory 59,000

Beginning finished goods inventory 25,000

Ending finished goods inventory 22,000

Maintenance – plant 4,700

Required:

- A. Prepare a cost of goods manufactured statement for 2019
- B. Prepare an income statement for 2019
- C. Assume 4,000 units were manufactured during 2019. What was the unit cost of plant depreciation? Would the unit depreciation cost change if 6,000 units were produced?

Problem- 2.3

During 2019, Culver Manufacturing company incurred the following cost in connection with its production activities:

Plant utilities \$ 36,600

Indirect labor 51,600

Raw materials purchase 210,000

Direct labor 156,000

Depreciation on plant equipment 36,600

Plant rent 30,000

Supplies used in production 15,600

Repairs to plant equipment 32,400

The beginning and ending inventories were:

	Beginning Inventory	Ending Inventory
Raw materials	\$ 26,400	\$ 22,400
Work in process	44,400	50,400
Finished goods	51,600	42,000

Required:

- A. Calculate the total amount of manufacturing overhead cost for 2019.
- B. Prepare a cost of goods manufactured statement for the year ended December 31,2019

Problem 2.4:

The following costs were incurred by Davis corporation in its manufacturing activities during 2019:

Plant insurance \$ 24,000

Direct labor 144,000

Raw materials purchases 183,600

Plant Utilities 51,600

Repairs to Plant equipment 20,400

Indirect labor 64,800

Plant supplies 12,000

The beginning and ending inventories were:

	Beginning Inventory	Ending Inventory
Raw materials	\$ 32,800	\$ 28,800
Work in process	49,200	54,000
Finished goods	39,600	37,200

Required:

- C. Calculate the total amount of manufacturing overhead cost for 2019.
- D. Prepare a cost of goods manufactured statement for the year ended December 31,2019

Problem 2-5

The following amounts and accounts were taken from the records of womble Manufacturing Company:

Advertising expenses	\$ 126,000	
Bad debt expense	33,000	
Depreciation- plant machinery	48,000	
Depreciation- Sales office equipment	18,000	
Direct labor	759,000	
Plant utilities	32,100	
Plant rent	234,000	
Plant supplies used	150,000	
Finished goods inventory 1/1/19	276,000	
Finished goods inventory 12/31/19	255,000	
Indirect Labor Cost	186,000	
Machinery repairs	42,000	
Sales office expenses	63,000	
Administrative salaries	462,000	
Property Taxes- Plant equipment	18,000	
Property taxes- Sales office equipment	39,000	
Purchase Discounts on raw materials	36,000	
Raw materials inventory 1/1/19	134,000	
Raw materials inventory 12/31/19	159,000	
Raw materials purchases	1,350,000	
Sales	3,766,000	
Sales returns	66,000	
Sales commissions expense	120,000	
Work in process inventory 1/1/19	51,000	
Work in process inventory 12/31/19	63,000	

Required

Prepare an income statement and a cost of goods manufactured statement for the year ended December 31,2019.

Problem 2.6

Ontario Manufacturing Company, Inc. has compiled the following amounts and accounts for the preparation of its 2019 financial statements:

1 1		
Work in process inventory 1/1/19	\$ 32,400	
Raw materials inventory 1/1/19	42,000	
Finished goods inventory 1/1/19	90,000	
Indirect labor	80,400	
Sales commissions expense	165,168	
Sales	1,376,400	
Raw materials purchases	432,000	
Freight in	18,000	
Purchase discounts on raw materials	8,400	
Plant rent	20,640	
Advertising expense	30,000	
Finished goods inventory 12/1/19	81,600	
Sales returns	19,200	
Factory supplies used	41,400	
Depreciation office equipment	59,400	
Raw materials inventory 12/31/19	46,800	
Direct labor	236,400	
Plant utilities	16,440	
Administrative salaries	188,640	
Work in process inventory 12/31/19	37,920	
Plant insurance	10,920	
Depreciation plant equipment	19,320	

Required:

Prepare an income statement and a cost of goods manufactured statement for the year ended December 31, 2019.