

B. Com (Hons.) III Semester
Paper Title: Cost Accounting
Paper Code: AS-2620

* Prepared by: Nilmani Tripathi, Assistant Professor, Department of Commerce, GGV

Answer 1. Short answer question

1. Eight example of factory overhead

- Depreciation on plant
- Depreciation of factory building
- Factory lighting
- Factory insurance
- Indirect labour
- Indirect materials
- Stores consumed
- Gas & water
- Supervisors salary

2. ABC analysis refers to Always Best Control. In this technique the total inventory of an organization is classified into three different categories:

- i. Category A: it consists of those materials which are used in less quantity but total value is very high.
- ii. Category B: it consists of those materials which are used in moderate quantity and total value is also moderate.
- iii. Category C: it consists of those materials which are used in bulk quantity but total consumption value is very low.

The following table shows the % quantity used and % total cost of inventories according to ABC analysis

Category	% in total quantity of Material	% in total cost of Material
A	5	75
B	20	20
C	75	5

3. Cost Centre: it is defined as a location or person or place or machine or item of equipment or thing for which cost can be ascertained and used for the purpose of cost Control.

4. The following are the main limitations of cost accounting:

- i. It is based on the estimates.
- ii. It is not applicable in trading concerns.
- iii. Certain items of financial nature are not included in cost accounting, which make the results unrealistic.
- iv. Certain techniques like marginal costing used in cost accounting takes into consideration only variable cost for the results, which is not correct.

5. There may be profit or loss depending upon the cost of goods sold. If the sales value is more than cost there will be profit, while if the sales value is less than the cost there will be loss.

6. Calculation of factory Cost

Prime cost	200000
Add:	
1. Foreman Salary	10000
2. Depreciation on plant	20000
Less	
1. Closing Stock of Work in Progress	(5000)
Factory Cost	225000

7. The cost accounting profit will be 3000 Rs. Less as compared to Financial Accounts.

8. The profit of financial Account will be 2000 more than cost accounting.

9.

a. Valuation of material issued according to LIFO

Date	Receipts			Issue			Balance		
	Quantity	Rate	Amount	Quantity	Rate	Amount	Quantity	Rate	Amount
Opening Stock							1250	20	25000
15 Jan.	350	18	6300				1250 350	20 18	25000 6300
20 Jan.	500	22	11000				1250 350 500	20 18 22	25000 6300 11000
25 Jan.				500 200	22 18	11000 3600	1250 150	20 18	25000 2700

b. Valuation of material issued according to FIFO

Date	Receipts			Issue			Balance		
	Quantity	Rate	Amount	Quantity	Rate	Amount	Quantity	Rate	Amount
Opening Stock							1250	20	25000
15 Jan.	350	18	6300				1250 350	20 18	25000 6300
20 Jan.	500	22	11000				1250 350 500	20 18 22	25000 6300 11000
25 Jan.				700	20	14000	550 350 500	20 18 22	11000 6300 11000

10. Cost of 3000 meters @ Rs. 48 per meter 144000
 Less: Sales value of normal waste(300× 3) 900
 Cost of Normal output 2700 pieces of one meter 143100
 Cost per pieces = $\frac{143100}{2700}$ = 53 Rs.
 Cost of 450 pieces = 450×53 = Rs. 23850

Answer 2.

First students are expected to write the meaning of reconciliation statement and memorandum reconciliation account and then they are expected to differentiate these two terms. In second part of the question the students are expected to give the imaginary profarma of Memorandum Reconciliation Account, which can be as under-

Memorandum Reconciliation Account

(as on)

Particulars	Amount	Particulars	Amount
To Loss as per Cost Book		To Profit as per Cost Book	
To Items of expenses shown in Financial Books but not in Cost Books		To Items of expenses shown in Cost Books but not in Financial Books	
To Items of expenses undercharged in Cost Book or over-charged in Financial Books		To Items of expenses undercharged in Financial Books or over-charged in Cost Books	
To Items of incomes over-charged in Cost Book or under- charged in Financial Books		To Items of incomes over-charged in Financial Books or under-charged in Cost Books	
To Over- valuation of opening stock in Financial Books		To Over- valuation of opening stock in Cost Books	
To Under- valuation of opening stock in Financial Books		To Under- valuation of opening stock in Cost Books	
To Depreciation Under charged in Cost Books or Over charged in Financial Books		To Depreciation Under charged in Financial Books or Over charged in Cost Books	
To Profit as per Financial Books		To loss as per Financial Books	

Answer 3

Classification of overheads is the process of grouping of the overheads according to their common characteristics. Overheads are classified on the basis of (i) Elements (ii) Functions and (iii) Behavior.

Classification by Elements

Overheads can be classified on the basis of elements in three groups as stated below:

(i) Indirect Materials: All those materials which do not form a part of the finished product or cannot be identified in the product conveniently are known indirect materials.

The examples are consumable stores, loose tools, wastrel cotton, lubricating oil, fuel, stationery, postages, etc. There are some materials which, even though, form a part of the finished product are treated as indirect I materials because they contribute a very small part of the total expenses. The examples are nuts, bolts, screws, threads, nails, etc.

(ii) Indirect labour: There are several labour costs which are not directly engaged I for production of goods and services. These labour costs come under indirect of labour. Some of the examples are salary of supervisor, works manager; wages to I coolie, watchman, electrician, storekeeper, timekeeper; director's fees, overtime payments, cost of idle time, etc.

(iii) Indirect expenses: Indirect expenses are those costs other than indirect materials and indirect labour which cannot be directly identified with a job or product.

The examples of indirect expenses are canteen expenses, repairs, depreciation, insurance, rent, rates, taxes, factory telephone, telegram and postage expenses, lighting, heating, advertisement, first aid and hospital expenses.

The above are broadly divided into cash expenses and non-cash expenses. Depreciation on plant, machinery, factory building, notional rent and interest outstanding expenses are the examples of non-cash expenses, whereas amount paid in cash are cash expenses.

Classification by Function

Overheads can be classified on the basis of the major functions of a business concern as shown below:

(i) Factory or Manufacturing Overheads: This is also known as production overheads or works overheads. Factory overheads represent all the indirect costs, i.e. indirect materials, indirect labour and indirect expenses incurred in connection with production of product or services. Following are the examples:

Indirect Materials: Consumable stores, grease, lubricating oil, cotton waste, loose tools, postages and stationeries used in the production departments, etc.

Indirect labour: Salary of factory supervisor, works manager, store keeper, foreman, etc.

Indirect expenses: Factory rent, factory lighting, factory repairs and maintenance, depreciation of factory building and machines, etc.

(ii) Administrative or Office Overheads: It is the indirect expenditures incurred in formulating poli y, directing the organisation, controlling and managing the operations of an undertaking other than production, selling, distribution, research and development activities.

This represents indirect materials, indirect labour and indirect expenses incurred by the administrative department in the office. Following are the examples of administrative overheads:

Indirect Materials: Cost of printing and stationary used in the office, cleaning materials, water containers, etc.

Indirect labour: Salary of Managing Director, Directors, General Managers, Accountants, Managers, Secretary, other staff of the office, clerks, Legal advisors, etc.

Indirect Expenses: Office rent, lighting, rates and taxes, Repairs, Insurance and depreciation of office building, furniture or equipment's, telephone expenses, legal charges, bank charges, etc.

(iii) Selling Overheads: Selling overheads represent those costs which are incurred for promoting sales, stimulating demands and facilitating selling of an organisation. In other words, this includes the indirect costs which are associated with marketing and selling and advertising activities. Following are the examples of overheads of sales department and sale management:

Indirect Materials: Printing and stationary used in sales department, catalogue free gifts, etc.

Indirect labour: Salary of sales manager, sales officers, other staff of sales department, commission to agents, etc.

Indirect expenses: Rent, rates and taxes of sales showroom, repair, maintenance, depreciation of sales office building, equipment and furniture, sales office telephone expenses lighting, heating of sales office, advertisement, bad debt, travelling expenses of salesman, etc.

(iv) Distribution Overheads: Distribution overheads represent those costs which are incurred from the time the product is completed in the factory until it reaches ultimate consumers.

It includes packing expenses, storage expenses and transportation expenses. In other words all indirect materials, indirect labour and indirect expenses incurred by distribution departments are known as distribution overheads. Following examples will make it clear.

Indirect material: Printing and stationary used in distribution office, secondary packing materials, etc.

Indirect labour: Salary to staff attached to distribution office, vehicle driver, coolie, etc.

Indirect expenses: Rent, rates, taxes in the ware house go down, repairs, maintenance, insurance, depreciation of warehouse go down, equipment, furniture, delivery van of distribution office, telephone expenses of distribution office, lighting, heating, cleaning of distribution office, etc.

Classification by Behavior / Variability

Overheads can be classified on the basis of their tendency to vary with the volume of production or sales or activity level. Behavior-wise, the overheads are grouped as under:

(i) Fixed Overheads:

Fixed overheads are those indirect costs which do not change inspired of the change in levels of production up to a given range? In other words, if the level of output goes up or comes down these overheads remain constant.

For instance the salary of a manager or the rent of a building does not vary even if we increase or decrease the volume of production.

Fixed overheads are also known as period cost, policy cost; stand by cost or shutdown cost. The examples fixed overheads are rent of building, plant and machinery; depreciation of building, plant and machinery; salary of Directors, Managers, clerks, accountants, office expenses such as postages, printing, stationary, bank charges legal fees, etc.

It is very important to note that the fixed overheads although remain fixed for a particular level of output, they are not wholly fixed in nature. When a business firm increases its capacity, it has to arrange additional fixed costs such as building, plant, machinery, etc. and this will result in more fixed overheads.

(ii) Variable overheads:

Variable overheads are those indirect costs which vary in direct proportion to the ' volume of output. In other words, when the output increases the total variable overheads increases proportionately and vice versa. But the variable overhead per unit remains fixed at different levels of activity.

The examples of variable overheads are fuel, power, maintenance, depreciation, lubricants, idle time cost, commission to sales man, spoilage, etc.

(iii) Semi-Variable overheads:

Semi-variable overheads are those indirect costs which remain constant to a certain extent and proportionately vary thereafter.

These overheads are partly fixed and partly variable. For instance, telephone expenses include fixed charge plus variable charge according to the number of calls. Some, times the sales representatives are entitled to a fixed salary plus a commission beyond a certain level of sales. This is a semi-variable overhead. The examples of semi variable overheads are repairs, maintenance, depreciation of plant and machinery, telephone charges.

Answer 4. Computation of Machine hour Rate for Machine No.47 Effective Working per Months=200

Particulars	Total	Per Hour
1. Standing Charges		
a. Shop Expenses	50	
b. Machine Insurance	<u>04</u>	
	Total <u>54</u>	
Standing charges per hour (54/200)		0.27
2. Machine Expenses		
a. Depreciation	$\frac{11000 - 1000}{20000}$	0.50
b. Repair & Maintenance	$\frac{5000}{20000}$	0.25
c. Power	$\frac{80}{200}$	0.40
	Machine Hour Rate Rs.	1.42

Answer 5.

Particular	Quantity(Ton)	Amount (Rs.)
Gross output of casting during the Year	1000	
Raw Materials ;		
Opening Stock of Raw Materials	7000	
Add: Purchase during the year	<u>50000</u>	
	57000	
Less: Closing Stock of Raw Materials	<u>5000</u>	
Raw Materials Consumed		52000
Direct Wages		10000
Work overheads		5000
Stores overheads		5200
Total Cost of gross output	1000	72200
Less; Sale of rejected casting	100	400
Cost of finished casting	900	71800
Add: additional Work Overhead on defective casting		180
		$\frac{900 \times 10 \times 20 \times 10000}{100 \times 100 \times 1000}$
Manufacturing cost of Saleable Casting	900	71980

Manufacturing cost of saleable casting per ton = $\frac{71980}{900}$ = Rs. 79.98

Answer 6.

Contract Account

Particulars	Amount	Particulars	Amount
To Materials	60000	By Materials in hand	10000
To Wages	50000	By Plant at site	100000
To Direct Expenses	200000	Less: Dep. @ 10%	<u>10000</u>
To Plant Purchased	100000	By Contractees A/C	1000000
To Indirect Expenses (20% of wages)	10000		
To Profit	680000		
	<u>1100000</u>		<u>1100000</u>

Answer No 7.

A.

Statement of Profit as per Cost Accounts

Particular	Amount
Materials consumed	14600
Wages	23200
	Prime Cost
	37800
Work overhead – 100% of labour	23200
	Work cost
	61000
Office overhead – 20% of work cost	12200
	Total cost
	73200
Profit	15200
	Sales
	88400

B. Profit and Loss Account

Particular	Amount	Particular	Amount
To Materials consumed	14600	By Sales	88400
To Wages	23200		
To Factory Expenses	22840		
To Office Expenses	12420		
To Net Profit	15340		
	88400		88400

C. Reconciliation Statement

Particular	Amount
Profit as per Cost Accounts	15200
Add: Factory overhead overcharged in Cost Accounts	360
Less: Office overhead undercharged in Cost Accounts	(220)
Profit as per Financial Accounts	15340

Answer 8.**Process A Account**

Particular	Amount	Particular	Amount
To Material used	10000	By Process B A/C	18500
To Wages	5000	(output transferred)	
To Direct Expenses	3000		
To Indirect Expenses	500		
$2000 \times \frac{5000}{20000}$			
	18500		18500

Process B Account

Particular	Amount	Particular	Amount
To Process A A/C	18500	By Process C A/C	30300
To Material used	2000	(output transferred)	
To Wages	8000		
To Direct Expenses	1000		
To Indirect Expenses	800		
$2000 \times \frac{8000}{20000}$			
	30300		30300

Process C Account

Particular	Amount	Particular	Amount
To Process B A/C	30300	By Finished Stock A/C	41000
To Material used	1000		
To Wages	7000		
To Direct Expenses	2000		
To Indirect Expenses	700		
2000 × $\frac{8000}{20000}$			
	41000		41000

-----X-----