## Paper 8- Cost Accounting

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## Section-A

Section A contains Question Number 1. All parts of this question are compulsory.

1. Answer the following questions
(a) Choose the most appropriate alternative for the following (you may write only the Roman numeral and the alphabet chosen for your answer): $1 \times 10=10$
(i) $\qquad$ is a segment of a business that is responsible for all the activities involved in the production and sales of products, systems and services.
(a) Profit centre
(b) Cost centre
(c) Responsibility centre
(d) Service cost centre
(ii) $\qquad$ is the value of alternatives foregone by adopting a particular strategy or employing resources in specific manner.
(a) Replacement cost
(b) Imputed cost
(c) Opportunity cost
(d) Relevant cost
(iii) $\qquad$ is a quantitative record of receipts, issues and closing balance of items of stores.
(a) Stores records
(b) Stores ledger
(c) Bin Card
(d) None of the above
(iv) The $\qquad$ is an analytical method of stock control which aims at concentrating efforts on those items where attention is needed most.
(a) VED Analysis
(b) FSN Analysis
(c) JIT Analysis
(d) ABC Analysis
(v) Idle time is $\qquad$
(a) Time spent by workers off their work
(b) Time spent by workers in factory
(c) Time spent by workers on their job
(d) Time spent by workers in office
(vi) $\qquad$ are those which vary in total direct proportion to the volume of output. These costs per unit remain relatively constant with changes in production.
(a) Fixed overhead
(b) Variable overhead
(c) Semi variable overhead
(d) None of the above
(vii) When the amount of overhead absorbed is less than the amount of overhead incurred, it is called
(a) Under-absorption of overhead
(b) Over-absorption of overhead
(c) Proper absorption of overhead
(d) None of the above
(viii) CAS 13 stands for
(a) Joint Cost
(b) Interest and financing charges
(c) Employee Cost
(d) Cost of Service cost centre
(ix) Which of the following items is not included in preparation of cost sheet?
(a) Carriage inward
(b) Purchase returns
(c) Sales commission
(d) Interest paid
(x) Cost Price is not fixed in case of
(a) Cost plus contracts
(b) Escalation clause
(c) De escalation clause
(d) All of the above
(b) Match the statement in column I with the most appropriate statement in column II
$[5 \times 1=5]$

|  | Column I |  | Column II |
| :--- | :--- | :--- | :--- |
| (i) | Indifference point (in units) | A. | Total sales less BEP sales |
| (ii) | Margin of safety | B. | Difference in Fixed Cost// <br> Difference in contribution per <br> unit |
| (iii) | Abnormal loss is transferred <br> to | C. | Treated as direct expenses |
| (iv) | Primary packing Materials <br> Consumed | D. | CAS 10 |
| (v) | Direct Expenses | E. | Costing Profit and loss account |

(c) State whether the following statements are 'True' or 'False'
(i) Closing stock of work-in-progress should be valued on the basis of prime cost.
(ii) Cost Accounting Standard Board should have minimum three eminent practicing members of the institute of Cost Accounts of India.
(iii) Cash discounts are generally excluded completely from the costs.
(iv) Finance cost shall form part of Direct Expense.
(v) Slow moving materials have a high turnover ratio.
(d) Fill in the blanks:
$[5 \times 1=5]$
(i) Goods Received Note is prepared by the $\qquad$ .
(ii) $\qquad$ cost are historical costs which are incurred in the past.
(iii) Wages sheet is prepared by $\qquad$ department.
(iv) Statement of cost per unit of equivalent production shows the per unit Cost $\qquad$ .
(v) Marginal cost is the $\qquad$ of sales over contribution.

## Section - B

## Answer any five questions from question numbers 2 to 8. <br> Each question carries 15 marks

2.(a) $A B C$ Ltd. manufactures a special product, which requires 'ZED'. The following particulars were collected for the year 2018-19:
(i) Monthly demand of Zed : 6,500 units
(ii) Cost of placing an order : ₹ 500
(iii) Re-order period : 5 to 8 weeks
(iv) Cost per unit : ₹ 50
(v) Carrying cost \% p.a. : $10 \%$
(vi) Normal usage : 500 units per week
(vii) Minimum usage
: 250 units per week
(viii) Maximum usage

Required:
(i) Re-order quantity
(ii) Re-order level
(iii) Minimum stock level
(iv) Maximum stock level
(v) Average stock level
(b) In a manufacturing concern XYZ Ltd. the machine shop has 8 identical machines manned by 6 operators. The machines cannot be worked without an operator wholly engages on them. The total cost of the machines is ₹ $12,00,000$. Following information relates to a six monthly period ended 31 st December, 2018:

| • Normal available hours per month | 208 |
| :--- | ---: |
| $\bullet$ Absenteeism (without pay) hours per month | 18 |
| $\bullet$ Leave(with pay)hours per month | 20 |
| $\bullet$ Normal idle time(unavoidable) hours per month | 10 |
| • Average rate of wages per day of 8 hours | ₹ 200 |
| • Production bonus | 25 \% on wages |
| • Power and fuel consumption | ₹ 20,000 |
| • Supervision \& indirect labour | ₹ 10,000 |
| • Electricity | ₹ 6,000 |
| The following particulars are on yearly basis |  |


| - Repairs and maintenance | $5 \%$ of value of <br> machines |
| :--- | ---: |
| - Insurance | $₹ 72,000$ |
| - Depreciation | $10 \%$ on original cost |
| - Other factory expenses | $₹ 28,000$ |
| - Allocated general management expenses | $₹ 85,000$ |

You are required to work out a comprehensive machine hour rate for the machine shop.

3 (a) Write a short note on CAS-3
[6]
(b) The following figures have been extracted from financial accounts of a manufacturing firm for the first year of its operation.

| Direct material consumption | $50,00,000$ |
| :--- | ---: |
| Direct wages | $30,00,000$ |
| Factory OH | $16,00,000$ |
| Administration OH | $7,00,000$ |
| Selling and distribution OH | $9,60,000$ |
| Bad debts | 80,000 |
| Preliminary expenses written off | 40,000 |
| Legal charges | 10,000 |
| Dividends received | $1,00,000$ |
| Interest on deposit received | 20,000 |
| Sales (1,20,000 units) | $1,20,00,000$ |
| Closing stock |  |
| Finished stock-4,000 units | $3,20,000$ |
| Work-in-progress | $2,40,000$ |

The cost accounts for the same period reveal that the direct material consumption was $₹ 56,00,000$. Factory OH recovered at $20 \%$ on prime cost; Administration OH is recovered @ ₹ 6 per unit of production; Selling and Distribution OH are recovered at ₹ 8 per unit sold. You are required to prepare Costing and Financial Profit and Loss Accounts and reconcile the difference in the profit in the two sets of accounts.

4(a). In the current quarter, $A B C$ company has undertaken two jobs. The data relating to these jobs are as under:

|  | Job 1000 | Job 1100 |
| :--- | ---: | ---: |
| Selling price | ₹ $1,07,325$ | ₹ $1,57,920$ |
| Profit as percentage on cost | $8 \%$ | $12 \%$ |
| Direct Materials | $₹ 37,500$ | $₹ 54,000$ |
| Direct wages | $₹ 30,000$ | $₹ 42,000$ |

It is the policy of the company to charge Factory overheads as percentage on direct wages and selling and administration overheads as percentage on Factory Cost.
The company has received a new order for manufacturing of a similar job. The estimate of direct materials and direct wages relating to the new order are ₹ 75,000 and ₹ 50,000 respectively. A profit of $20 \%$ on sales is required. You are required to compute:
(i) The rates of Factory overheads and selling and Administration overheads to be charged.
(ii) The selling price of the new order.

4(b). A product passes through three processes: L, M and N. 10,000 units at a cost of ₹ 1.10 were issued to process $L$. The other direct Expenses were as follows:

|  | Process L <br> $(₹)$ | Process M <br> $(₹)$ | Process N <br> $(₹)$ |
| :--- | ---: | ---: | ---: |
| Sundry materials | 1,500 | 1,500 | 1,500 |
| Direct Labour | 4,500 | 8,000 | 6,500 |
| Direct Expenses | 1,000 | 1,000 | 1,503 |

The wastage of process $L$ was $5 \%$ and in process $M 4 \%$. The wastage of process $L$ was sold at $₹ 0.25$ per unit and that of $M$ at $₹ 0.50$ per unit and that $N$ at $₹ 1.00$ per unit. The overhead charges were $160 \%$ of direct labour. The final product was sold at ₹ 10 per unit fetching a profit of $20 \%$ on sales. Prepare process $A / C$ and also find out percentage of wastage in Process N .

5(a) Mr. Nikhil started transport business with a fleet of 10 taxis. The various expenses incurred by him are given below:
(a) Cost of each taxi ₹ $1,20,000$
(b) Salary of office staff ₹ 6,500 p.m.
(c) Salary of garage staff ₹ 3,500 p.m.
(d) Rent of garage ₹ 10,000 p.m.
(e) Driver's salary per taxi ₹ 5,000 p.m.
(f) Road tax and repairs per taxi ₹ 30,000 p.a.
(g) Insurance premium @ $5 \%$ of cost p.a.

The life of a taxi is $3,00,000 \mathrm{Km}$. and at the end of which it is estimated to be sold at ₹ 30,000 . A taxi runs on an average $5,000 \mathrm{~km}$. per month of which $20 \%$ it runs empty. Petrol consumption is 10 Km . per litre of petrol costing ₹ 70 per litre. Oil and other sundry expenses amount to ₹ 50 per 100 Km . Calculate the effective cost of running a taxi per Km . If the hire charge is ₹ 15 per Km, find out the profit Mr. Nikhil may expect to make in the first year of operation.

5(b) The following details are available from the books of accounts of a contractor with respect to a particular construction work for the year ended $31{ }^{\text {st }}$ March, 2019:

|  | $(₹)$ |
| :--- | ---: |
| Contract price | $91,00,000$ |
| Cash received from contractee (90\% of work certified) | $71,91,000$ |
| Material sent to site | $35,82,600$ |
| Planning and estimation cost | $3,50,000$ |
| Direct wages paid | $32,62,700$ |
| Cost of plant installed at site | $8,00,000$ |
| Direct expenses | $1,68,000$ |
| Establishment expenses | $2,50,000$ |
| Material returned to store | 15,000 |
| Head office expenses apportioned | $2,50,000$ |
| Cost of work uncertified | $3,17,000$ |
| On 31st March, 2019: |  |
| Material at site | 85,000 |
| Accrued direct wages | 77,300 |
| Accrued direct expenses | 12,000 |

Value of plant(as revalued)
Required:
(i) Prepare the Contract account for the year ended 31 st March, 2019
(ii) Show the relevant Balance Sheet entries.
6.(a) A company budgets for a production of $2,00,000$ units. The variable cost per unit is ₹ 13 and fixed cost is ₹ 2 per unit. The company fixes its selling price to fetch a profit of $20 \%$ on cost.
(a) What is the Break-Even Point?
(b) What is Profit-Volume Ratio?
(c) If it reduces its selling price by $5 \%$, how does the revised selling price affect the breakeven point and the profit-Volume ratio?
(d) If a profit increase of $10 \%$ is desired more than the budget, what should be the sale at the reduced prices?
[8]
(b) A factory engaged in manufacturing plastic buckets is working at $40 \%$ capacity and produces 10,000 buckets per month. The present cost breakup for one bucket is as under:

| Materials | ₹ 25 |
| :--- | :--- |
| Labour | ₹ 8 |
| Overheads | ₹ $10(50 \%$ fixed) |

The selling price is ₹ 50 per bucket. If it is decided to work the factory at $50 \%$ capacity, the selling price falls by $3 \%$. At $80 \%$ capacity, the selling price falls by $5 \%$ accompanied by a similar fall in the price of materials.
You are required to prepare a statement showing the profits at $50 \%$ and $80 \%$ capacities and also determine the break even points at each of these production levels.
7.(a) The Standard labour complement and the actual labour complement engaged in a week for a job are as under:

|  | Skilled <br> workers | Semi skilled <br> workers | Unskilled <br> workers |
| :--- | ---: | ---: | ---: |
| a) Standard no. of workers in the gang | 32 | 12 | 6 |
| b) Standard wage rate per hour (₹) | 3 | 2 | 1 |
| c) Actual no. of workers employed in the <br> gang during the week | 28 | 18 | 4 |
| d) Actual wage rate per hour (₹) | 4 | 3 | 2 |

During the 40 hour working week the gang produced 1,800 standard labour hours of work. Calculate

1) Labour Efficiency Variance
2) Mix Variance
3) Rate of Wages Variance
4) Labour Cost Variance
(b) Prepare Sales Overhead Budget for the month of January, February and March for the estimates given below:
Advertisement 3,000
Salaries of the Sales Department $\quad 4,000$
Expenses of the Sales Department 2,000
Counter Salesmen's Salaries and Dearness Allowance 6,000
Counter Salesmen's commission is $2 \%$ on their sales. Travelling Salesmen's commission at $10 \%$ on their sales and expenses at $5 \%$ on their sales. The sales during the period were estimated as follows:

| Month | Counter Sales <br> $(₹)$ | Travelling Salesmen's Sales <br> $(₹)$ |
| :--- | ---: | ---: | ---: |
| January | $1,00,000$ | 20,000 |
| February | $1,50,000$ | 30,000 |
| March | $1,75,000$ | 40,000 |

## 8. Short Note (any three)

$[3 \times 5=15]$
(a) List the differences between Cost Control and Cost Reduction
(b) How would you classify costs based on behavior? Give an example to explain each class.
(c) What is Just-In-Time (JIT) system? List out its main benefits.
(d) What are the factors to be considered in Production Budget?

