## B. Com. (Hons.) <br> Paper No - BCH 4.1: COST ACCOUNTING

## OPERATING/SERVICE COSTING

Operating cost is the cost of providing a service. Example: Transport co, electricity co, hospitals, canteens, etc. It is just a variant of unit/ output costing.

OPERATING COST SHEET

| Particulars | Total | Per unit |
| :--- | :--- | :--- |
| STANDING CHARGES: |  |  |
| 1) License fees |  |  |
| 2) Road tax |  |  |
| 3) Garage rent |  |  |
| 4) Insurance |  |  |
| 5) Wages of drivers, cleaners, coolie |  |  |
| 6) Administration cost |  |  |
| 7) Interest on capital |  |  |
| 8) Directors fees |  |  |
| 9) Office expenses |  |  |
| 10) General garage o/h |  |  |
| 11) Heat \& light |  |  |
| 12) Driver's salary, foreman salary |  |  |
| 13) Supervision |  |  |
| 14) Other o/h expenses |  |  |
| VARIABLE CHARGES: |  |  |
| 1) Depreciation |  |  |
| 2) Repairs \& maintenance | Petrol |  |
| 4) Oil |  |  |

There are two important terms in operating costing:

1) Absolute Tonne $\mathrm{Km}=$ Distance between two stations $\times$ Load between two stations
2) Commercial Tonne $\mathrm{km}=$ Average load $\times$ Total Kms

Question 1: A truck starts with a load of 20 tonnes of goods from station R. It unloads 8 tonnes at station $S$ and rest of the goods at station $T$. It reaches back directly to station $R$ after getting reloaded with 10 tonnes of goods at station T. The distances between R to $\mathrm{S}, \mathrm{S}$ to T and then T to R are $30 \mathrm{~km} ; 50 \mathrm{~km}$ and 70 km resp. compute absolute and commercial tonne kms. (1900 TONNES, 2100 TONNES RESP)

Question 2: Mr Ramlal owns a fleet of taxis and the following monthly info is available from his records:

1. No of taxis= 10
2. Cost of each taxi= Rs 20,000
3. Salary of manager $=$ Rs 600 pm
4. Salary of accountant= Rs 500 pm
5. Cleaner $=$ Rs 200 pm
6. Mechanic $=$ Rs 400 pm
7. Garage rent $=$ Rs 600 pm
8. Insurance premium $=5 \% \mathrm{pa}$
9. Annual tax $=$ Rs 600 per taxi
10. Driver salary= Rs 200 per taxi
11. Annual repair $=$ Rs 1,000 per taxi
12. Total life of taxi $=2,00,000 \mathrm{~km}$

A taxi runs in all $3,000 \mathrm{kms}$ in a month of which $30 \%$ it runs empty. Petrol consumption is one litre for 10kms @ Rs 6.80/ltr. Oil and other sundries are Rs 5 per 100 kms . Calculate the cost of running a taxi per km. (RS 1.49)

Question 3: A Co. supplies the following details in respect of a truck of 5 tonnes capacity.

1. Cost of truck $=$ Rs 90,000
2. Estimated life $=10$ years
3. Diesel oil, grease $=$ Rs 15 per trip each way
4. Repairs \& maintenance $=$ Rs 500 pm
5. Cleaner's wages $=$ Rs 250 pm
6. Driver's wages $=$ Rs 500 pm
7. Insurance $=$ Rs $4,800 \mathrm{pa}$
8. $\mathrm{Tax}=$ Rs $2,400 \mathrm{pa}$
9. General supplementary charges $=$ Rs $4,800 \mathrm{pa}$

Truck carries goods to and from city covering a distance of 50 miles each way. While going to the city, freight is available to the extent of full capacity and in return $20 \%$ of capacity.

Assume that truck runs 25 days a month. Work out:

1) Operating cost per tonne mile. (RS 0.500)
2) Rate per trip that the Co should charge, if profit of $50 \%$ of freight is to be earned. (RS 300)

Question 4: A practicing CA now spends 90 paise per km in Taxi fare for his clients work. He is considering the other 2 alternatives, the purchase of a new small car or an old big car. The estimated cost figures are:

| Items | New Small car | Old Big car |
| :--- | :--- | :--- |
| Purchase | Rs 35,000 | Rs 20,000 |
| Sale after 5 years | Rs 19,000 | Rs 12,000 |
| Repairs \& service pa | Rs 1,000 | Rs 1,200 |
| Tax \& Insurance pa | Rs 1,700 | Rs 700 |
| Petrol consumption per litre | 10 km | 7 km |
| Petrol price per litre | Rs 3.50 | Rs 3.50 |

He estimates that he does $10,000 \mathrm{~km}$ annually. Which of the two alternatives will be cheaper? If his practice expands and he has to do $19,000 \mathrm{~km}$ pa, what should be his decision? At how many km per annum will the cost of 2 cars breakeven and why? Ignore interest and income tax.

## JOB COSTING

Under job costing, costs are calculated for each job, work order or project separately. Job costing is employed in special order concerns which require separate specifications for goods to be produced. Like furniture shop, printing shops, repair shops, etc.

Question 1: Calculate S.P. of Job no-101 on the following basis:

| Material | Rs 12.00 |
| :--- | :--- |
| Direct wages 22 hrs @ Rs 0.25 per hour <br> (Deptt A= 10 hrs, B= 4 hrs \& C= 8 hrs) | Rs 5.50 |
| Prime cost | Rs 17.50 |
| Plus 20\% on prime cost | Rs 3.50 |
|  | Rs 21 |

An analysis of the previous year's Profit \& loss A/c shows the following:

- Material used $=$ Rs 78,000
-D wages: Deptt A=Rs 5000, B=Rs 6,000 and C=Rs 4,000
-Factory O/h: Deptt A=Rs 1,400, B=Rs 2,400 and C=Rs 3,200
-Selling cost $=$ Rs 30,000

1) Draw up a job cost sheet.
2) Calculate and enter the revised costs on previous year's figures as a basis.
3) Add $10 \%$ to cost for profit \& give S.P.
(SP= RS 28.88)

Question 2: From the following find out the value of Tender.
Material used = Rs 3,000
Direct expenses= Rs 250
Productive wages $=$ Rs 2,300
Provide $60 \%$ of productive wages for works on cost and $20 \%$ on works cost for office on cost. Profit to be realized $15 \%$ on tender. (TENDER=RS 9,783)

Question 3: he Managing director of a Co. consults you to quote the minimum price at which he can sell output of his company which intends for mass production in future. Following are Co's last year's records:

1. Production \& Sales= 100 units
2. Material $=$ Rs 28,000
3. D labour $=$ Rs 14,000
4. $D$ charges $=$ Rs 2,000
5. $\mathrm{W} o / \mathrm{h}=\mathrm{Rs} 14,000$
6. Office $\mathrm{o} / \mathrm{h}=$ Rs 5,600
7. Selling cost= Rs 6,400
8. Profit= Rs 10,000
9. Sales $=$ Rs 80,000

You ascertain that $30 \%$ of Works o/h fluctuates directly with production and $60 \%$ of selling o/h fluctuates with sales. It is anticipated that co will produce 400 units p.a and direct labour will decrease by $20 \%$ while fixed works on cost will increase by Rs 5,000 . Office cost and fixed selling cost charges are expected to show an increase of $30 \%$ each, but otherwise no changes are expected.

Question 4: A co intends to submit a Tender. You are given the following information:

1. Purchase of $R / M=$ Rs $4,59,720$
2. Productive wages Rs $2,80,000$
3. Opening stock of $\mathrm{r} / \mathrm{m}=$ Rs 33,280
4. Closing stock of $\mathrm{r} / \mathrm{m}=$ Rs 93,000
5. Opening stock of $\mathrm{FG}=\mathrm{Rs} 75,000$
6. Closing stock of $\mathrm{FG}=$ Rs 77,500
7. Office $\mathrm{o} / \mathrm{h}=$ Rs 37,500
8. Works o/h = Rs 70,000
9. $\operatorname{Sales}=$ Rs $9,42,000$

Prepare a cost sheet, using above \% of works $\mathrm{O} / \mathrm{h}$ to productive wages, office $\mathrm{O} / \mathrm{h}$ to works cost and NP $\%$.

Prepare a tender on the basis of following info:

1. Cost of raw material used $=$ Rs 80,000
2. Wages paid to workers $=$ Rs 40,000
(TENDER=RS 1, 63,800)

Question 5: Following information is obtained from the books of a Co.

| Particulars | Completed Jobs (Rs) | WIP (Rs) |
| :--- | :---: | :---: |
| R/m supplied | 90,000 | 30,000 |
| Wages | $1,20,000$ | 60,000 |
| Chargeable expenses | 12,000 | 6,000 |
| Material returned to stores | 2,000 | - |

Factory o/h is 70\% of wages. Office O/h is $30 \%$ of factory cost and S \& D o/h are $20 \%$ of COP. The completed jobs realized Rs 5, 00,000.

Prepare:

1) WIP ledger control $\mathrm{A} / \mathrm{c}$
2) Completed job ledger control a/c
3) Cost of sales $a / c$
