INTER CA – MAY 2018

PAPER 3 : COST AND MANAGEMENT ACCOUTING

Branch: Multiple Date:

Note: Question 1 is compulsory. Attempt any five from the rest.
Note: All questions are compulsory.

Question 1 (5 Marks each)

A) The management of Come-In & Go-Out Ltd are worried about their increasing Labour Turnover in the Factory and before analyzing the causes and taking remedial steps, they want to have an idea of the profit foregone as a result of labour turnover in the last year.

Last year Sales amounted to ` 1,66,06,600 and the GP ratio was 20%. The total number of actual hours worked by the Direct Labour force was 8.84 Lakhs. As a result of the delays by the Personnel Department in filling vacancies due to Labour Turnover, 2,00,000 potentially productive hours were lost. The actual direct labour hours included 60,000 hours attributable to training new recruits, out of which 40% of the hours were unproductive.

The cost incurred consequent on labour turnover revealed on analysis the following –

- Settlement Cost due to leaving ` 87,640
- Selection Costs `32,812
- Recruitment Costs ` 53,480
- Training Costs ` 60,980

Assuming that the potential production lost as a consequence of Labour Turnover could have been sold at prevailing prices, find the profit foregone last year on account of Labour Turnover.

B) Two products P and Q are obtained in a crude form and require further processing at a cost of ` 5 for P and ` 4 for Q per unit before sale. Assuming a net margin of 25% on cost, their Sale Prices are fixed at ` 13.75 and ` 8.75 per unit respectively During this period, the Joint Cost was ` 88,000 and the output were 8,000 units of P and 6,000 units of Q. You are required to ascertain the Joint Cost per unit.

C) A Lorry starts with a load of 24 tonnes of goods from Station A. It unloads 10 tonnes at Station B and rest of goods at Station C. It reaches back directly to Station A after getting reloaded with 18 tonnes of goods at Station C. The distance between A to B, B to C and then from C to A are 270 kms, 150 kms and 325 kms respectively. Compute 'Absolute Tonne-Kms' and 'Commercial Tonne-Kms'.

D) The Dabour Co. Ltd is developing the annual profit plan. They have just reviewed the "first cut" at the Annual Income Statement and are concerned with the ` 1,10,000 indicated profit on a sales volume of 20,000 units. The Fixed Cost structure of ` 9,90,000 appears to be high and they have some doubts about departing from the unit Sales Price of ` 100. There is a general agreement that the "Profit Target" should be ` 2,20,000.

Required:

1. Compute the Budgeted BEP in rupees and in units and the number of units required to be sold to earn the Target Profit.
2. What will be the new BEP in the following cases –

(a) If Sales Price is increased by 20% and sales will be dropped by 15% then what would be the new BEP in rupees and in units. What would be the new profit figures? How many units would have to be sold to earn the Target Profit?

(b) A decrease in Fixed Costs of ` 55,000 and a decrease in variable costs of 6% are contemplated. What would be new BEP in rupees? How many units must be sold to earn a Target Profit?

Question 2 (8 marks each)

A) The Cost structure of an article (the Selling Price of which is ` 45,000) is Materials - 50%, Labour - 20% and Overheads - 30%. An increase of 15% in the cost of materials and 25% in the costs of labour is anticipated. These increased costs in relation to the Selling Price would cause a 25% decrease in the profit per article.

You are required to determine - (1) the Profit per article being earned at present, and (2) the New Selling Price so as to earn the same percentage of profit to sales as before.

B) From the details furnished below you are required to compute a comprehensive Machine-Hour Rate –

Original Purchase Price of the machine (subject to depreciation at 10% p.a. on Original Cost)	` 3,24,000
normal working hours for the month (The machine works to only 75% of capacity)	200 hours
Wages of Machineman	` 125 per day (of 8 hours)
Wages for a Helper (Machine Attendant)	` 75 per day (of 8 hours)
Power Cost for the month for the time worked	` 15,000
Supervision Charges apportioned for the machine centre for the month	` 3,000
Electricity & Lighting for the month	` 7,500
Repairs & Maintenance (Machine) including Consumable Stores per month	` 17,500
Insurance of Plant & Building (apportioned) for the year	` 16,250
Other General Expenses per annum	` 27,500

The workers are paid a fixed dearness allowance (DA) of 1575 per month. Production bonus payable to the workers in terms of an award is equal to 33.33% of basic wages and DA against leave wages and holidays with pay to arrive at a comprehensive labour wage for debit to production.

Question 3

A) ZED Company supplies Plastic Crockery to Fast Food Restaurants in a metropolitan city. One of its products is a Special 3owl, disposable after initial use, for serving soups to its customers. These Bowls are sold in packs of 10 pieces at a once of ` 50 per pack.

The demand for Plastic Bowl has been forecasted at a fairly steady rate of 40,000 packs every year. The Company purchases ne Bowl direct from a Manufacturer at ` 40 per pack, within a three days lead time. The ordering and related cost is ` 8 per order. The Storage Cost is 10% per annum of average inventory investment.

Required:

1. Calculate Economic Order Quantity.
2. Calculate the number of orders needed every year.
3. Calculate the Total Cost of Ordering and Storage of Bowls for the year.
4. Determine when should the next order to be placed. (Assume that the Company does not maintain a Safety Stock and that the present inventory level is 333 packs with a year of 360 working days.)

B) DEF Bank operated for years under the assumption that profitability can be increased by increasing Rupee volumes. But that has not been the case. Cost Analysis has revealed the following –

Activity	Activity Cost (`)	Activity Driver	Activity Capacity
Providing ATM Service	1,00,000	No. of transactions	2,00,000
Computer Processing	10,00,000	No. of transactions	25,00,000
ssuing Statements	8,00,000	No. of statements	5,00,000
Customer Inquiries	3,60,000	Telephone minutes	6,00,000

The following annual information on three products was also made available –

	Checking Accounts	Personal Loans	Gold Visa
Units of Product	30,000	5,000	10,000
ATM Transactions	1,80,000	0	20,000
Computer Transactions	20,00,000	2,00,000	3,00,000
Number of Statements	3,00,000	50,000	1,50,000

Telephone Minutes	3,50,000	90,000	1,60,000

Required:

1. Calculate rates for each activity.
2. Using the rates computed in requirement (1) above, calculate the Cost of each Product.

Question 4 (8 marks each)

A) The following Incomplete Accounts are furnished to you for the month ended 31st March.

Dr **Stores Ledger Control Account** **Cr**

1st March	To balance b/d	54,000			

Work in Progress Control Account

1st March	To balance b/d	6,000			

Finished Goods Control Account

1st March	To balance b/d	75,000			

Factory Overhead Control Account

	Total Debits for March	45,000			

Factory Overhead Applied Account

Cost of Goods Sold Account

Creditors Account

			1st March	By balance b/d	30,000

Additional Information:

(a) The Factory Overheads are applied by using a Budgeted Rate based on Direct Labour hours. The Budget for Overheads for the year is ` 6,75,000 and Budget of Direct Labour Hours is 4,50,000.

(b) Balance in Creditors Account on 31st March is ` 15,000 and payments made to Creditors in March amounts to ` 1,05,000.

(c) The Finished Goods Inventory as on 31st March is ` 66,000.

(d) The Cost of Goods Sold during the month was ` 1,95,000.

(e) On 31st March, there was only one unfinished Job in the Factory. The Cost records show that ` 3,000 (1,200 Direct Labour hours) of Direct Labour Cost and ` 6,000 of Direct Material Cost had been charged.

(f) A total of 28,200 Direct Labour Hours were worked in March. All Factory Workers earn same rate of pay.

(g) All Actual Factory Overheads incurred in March, have been posted.

You are required to find out the following items –

(i) Materials purchased during March.	(v) Direct Materials Consumed during March.
(ii) Cost of Goods completed in March.	(vi) Balance of Stores Control Account on 31st March.
(iii) Overheads applied to production in March.	(vii) Over-absorbed or under-absorbed for March.
(iv) Balance of Work in Progress on 31st March.	

B) A product passes through 3 processes A,B and C. 10,000 units at a cost of ` 1.10 p. were issued to Process A. The other direct expenses were as follows –

Particulars	Process A	Process B	Process C
Direct Material	` 1,500	` 1,500	` 500
Direct Labour	` 4,500	` 8,000	` 6,500
Direct Expenses	` 1,000	` 1,000	` 991

The wastage of Process 'A' was 5% and that of Process 'B' was 4%. The wastage of Process 'A' was sold at ? 0.25 per unit and that of 'B' at ` 0.50 per unit and that of 'C' at ` 1.00 per unit.

Overheads are charged at 160% of Direct Labour. The Final product was sold at ` 10 per unit fetching a profit of 20% on Sales. Find out the percentage of wastage in Process C.

Question 5

(A) SB Constructions Limited has entered into a big contract at an agreed price of ? 1,50,00,000 subject to an Escalation Clause for material and labour as spent out on the contracy and corresponding actuals are as follows:

Material	Standard		Actual	
	Quantity (tonnes)	Rate per tonne	Quantity (tonnes)	Rate per tonne
A	3,000	` 1,000	3,400	` 1,100
B	2,400	` 800	2,300	` 700
C	500	` 4,000	600	` 3,900
D	100	` 30,000	90	` 31,500

Labour	Hours	Hourly Rate	Hours	Hourly Rate
L_1	60,000	` 15	56,000	` 18
L_2	40,000	` 30	38,000	` 35

Required:

1. Give your analysis of admissible Escalation Claim, and determine the Final Contract Price payable.
2. Prepare the Contract Account, if the all expenses other than Material and Labour related to the Contract are ` 13,45,000.
3. Calculate the following variances and verify them -
   - Material Cost Variance
   - Material Price Variance
   - Material Usage Variance
   - Labour Cost Variance
   - Labour Rate Variance
   - Labour Efficiency Variance. **(8 marks)**

(B) (i) Name the method of costing and unit of costing **(4 marks)**

Sr. no.	Industry	Method of costing	Cost unit
1	Sugar company having own sugarcane fields		
2	Engineering works		
3	Chemicals		
4	Breweries		

(ii) Difference between explicit and implicit cost **(4 marks)**

Question 6

(A) The M-Tech Manufacturing Company is presently evaluating two possible processes for the manufacture of a toy. The following information is available:

Particulars	Process A	Process E
Variable Cost per unit	` 12	` 14
Sales Price per unit	` 20	` 20
Total Fixed Costs per year	` 30,00,000	` 21,00,000
Capacity (in units)	4,30,000	5,00,000
Anticipated Sales (Next Year, in units)	4,00,000	4,00,000

Suggest:

1. Which process should be chosen?
2. Would you change your answer as given above, if you were informed that the capacities of the two processes are as follows: A 6,00,000 units, B 5,00,000 units? Why? **(6 marks)**

(B) Difference between Job evaluation and Merit ratings. **(5 marks)**

(C) Difference between BIN CARD and STORES LEDGER **(5 marks)**

Question 7

(A) You are given the following data of a manufacturing concern:

Variable Expenses at (50% capacity):	`
Materials	48,00,000
Labour	51,20,000
Others	7,60,000
Semi-Variable Expenses (at 50% Capacity):	`
Maintenance and Repairs	5,00,000
Indirect Labour	19,80,000
Sales Department Salaries	5,80,000
Sundry Administrative Expenses	5,20,000
Fixed Expenses:	`
Wages & Salaries	16,80,000
Rent, Rates and Taxes	11,20,000
Depreciation	14,00,000
Sundry Administrative Expenses	17,80,000

The Fixed Expenses remain constant for all levels of production. Semi-Variable Expenses remain constant between 45% and 65% of capacity whereas it increases by 10% between 65% and 80% capacity and by 20% between 80% and 100% capacity.

Sales at various levels are as under:

Capacity	Sales (`)
75%	2,40,00,000
100%	3,20,00,000

Prepare Flexible Budget at 75% and 100% capacity **(8 Marks)**

(B) How is overtime premium treated in cost accounting? **(8 marks)**

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