Advanced Cost Accounting

2010 April

Commerce Accountancy MCom

Part 1

University of Mumbai

Con. 2186-10 Accountancy Paper II Advanced Cost Accounting LW Apr 10

(3 Hours) Total Marks .

N.B. (1) Q. no. 1 is **compulsory**. Attempt any four questions from the **remaining**.

(2) All questions carry **20** marks **each** and sub-questions carry **equal** marks unless specified to the contrary.

(3) Workings to form **part** of the solutions and **necessary** assumptions to be made and stated **clearly**.

1. A firm already in production gives you its following details :—

Annual Capacity (Units)	Unit Cost Rs.	Unit Price Rs.
6,000	80	100
7,000	75	97
8,000	74	95
9,000	72	
10,000	71	

The firm is operating at 8,000 units' capacity at present and cannot exceed, in any case, totally 15,000 units' capcity level by any means. Under the circumstances, the firm receives two alternative additional orders, only one of which it can accept :–

(a) For 2,000 units from an export market at a price of Rs. 70 per unit.

(b) For 7,000 units from another export market at a price of Rs. 75 per unit and it is given that the firm has to increase its establishment for going from 10,000 units to 15,000 units which would result into additional fixed cost of Rs. 30,000 per annum, in addition to the 'per unit' cost of Rs. 71 at 10,000 units level which would remain the same even subsequently i.e. at the level of 15,000 units.

Advise the firm as to whether any of the alternative additional export orders should be accepted or not, any if yes, which one ?

2. A State Transport Corportation has been in serious financial and operational difficulty due to high prices of spares, rising fuel cost and high wages.

The running operational expenses have been worked out for a single-deck bus and are reproduced below :—

Total fleet-500 buses single-deck

Average Passengers occupying each trip : 40

List of expenses for one year period ended 31.12.2008 :

	Rs.
Variable Expenses : Total for 30,000 km. per bus per year	
(i) Fuel diesel oil	10,000
(ii) Tyres, tube and batteries	5,000
(iii) Lubricants	1,500
(iv) Spare parts and accessories	4,500
(v) Wages, fringe benefit and bonus	28,000
Fixed Expenses :	
(i) Road Tax	1,500
(ii) Insurance	2,500
(iii) Rent for night parking garage	3,000
(iv) Maintenance garage establishment cost	2,000
(v) Original cost per bus	2,00,000

Depreciation @ 15% p.a. on straight line basis

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Administrative Expenses :

		Total per year Rs.
(a)	Administrative establishment cost (including Salaries and P. F.)	13,05,000
(b)	Staff welfare cost	57,000
(c)	Retirement gratuity	50,000
(d)	Rates and taxes	50,000
(e)	Travelling and conveyance	38,000
(f)	Postage, telephone and stationery	2,10,000
(g)	Audit fee	25,000
(h)	Electricity	70,000
(i)	Interest and bank charges	2,80,000
(j)	Miscellaneous	40,000

Administrative overhead is to be absorbed in the operating cost on the basis of availab number of budgeted operatable fleet (calculated on the basis of total fleet less 15' breakdown).

You are required to advise management regarding the fare structure on cost plu 10% basis for the following stages of travel, assuming that the fare is charged i proportion to kilometers travelled.

Minimum fare on :–

1st stage of travel 5 km.
2nd stage of travel 10 km.
3rd stage of travel 15 km.
(Rounded off to nearest paise)

3. V. N. Ltd. operates on a standard cost system to produce an article mixingtwo raw materials and following are the standards :--

40% of Material A at Rs. 4 per kg., 60% of Material B at Rs. 3 per kg.

A standard loss of 15% is expected in production.

The following actual cost data is given for March, 2010 (Production : 1700 kg of inished product) :–

	Stock on 1.3.2010	Stock on 31.3.2010	Purchase for March, 2010	
			Kgs.	Rs.
Material A	35 kgs. (no variance)	5 kgs.	800	3,400
Material B	40 kgs. (no variance)	50 kgs.	1,200	3,000

Calculate the following variances in respect of the purchase during the month that are consumed :—

(a) Material Price Variance
(b) Material Mix Variance
(c) Material Yield Variance
(d) Material Cost Variance
(e) Material Usage Variance.

4. The following are the estimated sales of a company for eight months ending 30.11.2008 :—

Months		Estimated Sales (Units)
April	2008	12,000
May	2008	13,000
June	2008	9,000
July	2008	8,000
August	2008	10,000
September	2008	12,000
October	2008	14,000
November	2008	12,000

As a matter of policy, the company maintains the closing balance of finished goods and raw materials as follows :—

Stock items	Closing balance of a month
Finished goods	50 % of the estimated sales for the next month
Raw materials	Estimated consumption for the next month.

Each unit of production requires 2 kg. of raw material costing Rs. 5 per kg. Prepare Production Budget (in units) and Raw Material Purchase Budget (in units and cost) of the company for the half year ending 30th September, 2008.

5. Following information is available regarding process A for the month of February 2008 : —

			Units
(i)	Opening Stock		4,000
	Degree of completion		
	Material	100%	
	Labour and Overhead	25% each	
	New units input in process		16,000
	Total units processed		20,000
	Production report shows the following results :		
	Units completed		14,000
	Units in process on 28th February, 2008		
	(Closing stock) :		
	Material	100%	
	Labour and Overhead	33 1/3rd % each	6,000
	Loss in Production		nil
	Cost record		
	Work-in-process as on 31st January, 2008 :		Rs.
	Material		1,200
	Labour		200
	Overhead		200
	Cost for February 2008 :		
	Material		5,120
	Labour		3,000
	Overhead		3,000
	Total cost to be accounted for		12750

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Presuming that FIFO method of Inventory Costing is used, prepare :
(i) Statement of equivalent production
(ii) Statement showing cost for each element
(iii) Statement of apportionment of cost
(iv) Process cost account for process A.

6. From the following information you are required to prepare necessary Ledger Accounts and Trial Balance under system of integrated accounts in the books of Excel Co. Ltd. :

Particulars	Rs.
Material purchased on credit	29,600
Wages paid	33,600
Wages productive	29,600
Wages unproductive	4,000
Material issued to production	25,600
Works expenses incurred	13,000
Finished goods at cost	60,000
Works expenses charged to production	17,000
Administration expenses paid and charged to production	8,800
Seling overheads paid and charged to sales	6,000
Cash sales	85,000

7. (a) X Ltd. furnishes you the following particulars :—
Product X requires 20 hours per unit
Standard rate per hour is Rs. 2
Units producted : 4,000
Hours taken 76,000 (including 200 hours for power failure) at Rs. 2·10 per hour.
Calculate :–
(i) Direct Labour Cost Variances
(ii) Direct Labour Rate Variances
(iii) Direct Labour Efficiency Variance
(iv) Direct Labour Idle Time Variance.

(b) Explain in brief "Methods of Costing" and "Techniques of Costing."

8. (a) The ratio of variable cost of a product to sales is 70%. The break-even point occurs at 60% of the capacity sales. Find the capacity sales when fixed costs are Rs. 90,000. Also compute profit at 75% of the capacity sales.

(b) Explain the concept of 'Cost Escalation Contracts' illustrating it with two examples-one of an Incomplete contract and another of a Complete contract.

9. Write short notes on (any four) :—
(a) Fixed Overhead Variance
(b) Principles of Integrated System of Accounting
(c) Functional Budget
(d) Cost Plus Contract
(e) Margin of Safety
(f) Rights of Cost Auditor.