Advanced Cost Accounting

2009 October

Commerce Accountancy MCom

Part 1

University of Mumbai

MCOM - PART I
Accountancy : paper II 28th OCT 2009
Advanced Cost Accounting

Con. 4011-09. LG-1994

(3 Hours) [Total Marks : 100

N.B. (1) Question 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. The following particulars are taken from the records of the company engaged in manufacturing two products, A and B, from a certain material :

Particulars	Product A (per unit) Rs.	Product B (per unit) Rs.
Sales	2,500	5,000
Material cost (Rs. 50 per kg)	500	1,250
Direct labour (30 per hour)	750	1,500
Variable overheads	250	500

Total fixed overheads : Rs. 10,00,000

(a) Comment on the profitability of each product when :
   (i) Total sales in value is limited;
   (ii) Raw materials is in short supply.
   (iii) Production capacity (labour) is the limiting factor,
(b) When total availability of raw materials is 20,000 kg and maximum sales potential of each product is 1,000 units, find the product mix to yield maximum profits.

2. Mr. Hakim runs a Tempo service in the town and has three vehicles. He furnishes you the following data and wants you to compute the cost per running mile :

	Vehicle A Rs.	Vehicle B Rs.	Vehicle C Rs.
Cost of vehicle	25,000	15,000	50,000
Road License fee per year	750	750	750
Supervision salary (yearly)	1,800	1,200	1,500
Driver's wage per hour	4	4	4
Cost of fuel per litre	1·50	1·50	1·50
Repairs and Maintenance per mile	1·50	2·00	3·00
Tyre cost per mile	1·00	0·80	1·20
Garage rent per year	1,600	550	1,000
Insurance Premium yearly	850	500	1,500
Miles run per litre	6	5	4
Mileage run during the year	15,000	6,000	9,000
Estimated life of vehicles	1,00,000 miles	75,000 miles	1,20,000 miles

Charge interest at 10% p.a. on the cost of vehicle. The vehicles run 20 miles per hour on an average.

[TURN OVER

3. In a factory the standard mix consists of 60 kgs of X and 40 kgs of Y. The standard loss of production is 30%. The standard price of X is Rs. 5 per kg. and of Y Rs. 10 per kg.
   The actual mixture and yield were as follows :
   X :— 80 kgs at Rs. 4·50 per kg. Y :— 70 kgs at Rs. 8 per kg. Actual yield :— 115 kgs.
   Calculate :
   (a) Material Cost Variance
   (b) Material Price Variance
   (c) Material revised usage variance
   (d) Material Mix Variance, and
   (e) Material Yield Variance.

4. Ashok Ltd is engaged in process industry. During the month of August 2008, 2000 units were introduced in process 'X'. The normal loss was estimated at 5% of input. At the end of the month 1,400 units had been produced and transferred to process 'Y', 460 units were incomplete and 140 units, after passing through fully the entire process, had to be scrapped. The incomplete units had reached the following stage of completion :

Material	75% Completed
Labour	50% Completed
Overhead	50% Completed

Following is the further information on the process 'X' :—

Cost of 2000 units	Rs. 58,000
Additional Direct Materials	Rs. 14,400
Direct Labour	Rs. 33,400
Other Overheads	Rs. 16,700
Units Scrapped Realised	Rs. 10 each

Prepare statement of equivalent production, computation of cost per equivalent unit for each cost element, statement of cost apportionment and process 'X' account

5. The Jaydeep Co. Ltd., has completed most of the functional budgets and it is now time to prepare the cash budget. An analysis of the various budgets concerned reveals the requirements.

Requirements for Cash Budgets

Month	Sales (Credit)	Materials	Wages	Production Exp.	Admin Exp.	Selling Exp.	Distribution Exp.	Research and Development Exp.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Oct. 08	80 000	40,000	10,000	8,400	3,400	5,000	3,000	1,000
Nov., 08	60,000	30,000	9,000	8,000	3,300	4,500	2,500	1,000
Dec. 08	40,000	20,000	8,000	7,500	3,500	4,000	2,000	1,000
Jan. 09	50,000	40,000	9,000	8,000	3,700	4,400	2,400	1,200
Feb. 09	60,000	50,000	10,000	8,500	3,900	4,800	2,600	1,200
March 09	80,000	60,000	11,000	9,000	3,600	5,200	2,900	1,200
April 09	70,000	50,000	9,000	8,000	3,500	5,000	2,600	1,500
May 09	60,000	30,000	8,000	7,500	3,700	4,800	2,500	1,500
June 09	50.000	40,000	9,000	8,000	3.900	4,500	2,400	1,500

Period of Credit allowed by creditors—2 months
Period of Credit allowed to debtors—3 months
Lag in Payment of overheads—1 month
Lag in Payment of wages 1/8 month
The cash balance on 1st January, 2009 is expected to be Rs. 1,00,000.