

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA Second Semester (Regular / Evening) Examination May 2010
Subject code: 820001

Subject Name: Cost and Management Accounting

Date: 21 /05 /2010

Time: 11.00 am- 01.30 pm

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** Padma Ltd. produces a commodity by blending two raw materials – A and B. The following are the details regarding the raw materials: **07**

Material	Standard mix	Standard price per kg.
A	40%	Rs.5
B	60%	Rs.6

The standard process loss is 15%. During the month of March 2009, the company produced 4,250 kg. of finished product. The position of stock and purchases for the month of March 2009 are as under:

Material	Stock as on March 01, 2009 (Kg.)	Stock as on March 31, 2009 (Kg.)	Purchases during March 2009	
			(Kg.)	(Rs.)
A	85	40	2,400	13,200
B	90	55	2,600	15,080

You are required to work out the following variances with the use of formulae only.

- a. Material Price Variance and
 - b. Material Yield Variance
- (b)** Would you feel that, Rolling budget provide the supports to the managers to achieve the realistic and attainable target? Comment. **03**
- (c)** Discuss the difference between Efficiency audit and Propriety audit. **04**
- Q.2 (a)** Lilavati Ltd., Company manufactures a broad line of toys for the age group of different children. The Lilavati owns three plants those are located in Durgapur, Cochin, and Nashik. The Durgapur plant is operating at 85 percent capacity. Its main product, infant child favours toys, has experienced softness in the market which has led to predictions of further softening of the market and predictions of a decline in production to 65 percent capacity. If that happens, workers will have to be laid off and one wing of the factory closed. The Cochin plant manufactures toys for the age group of 5 to 10 years, for this purpose they use the basic structure manufactured by the Durgapura plant as an integral component. Demand for the toys of age group of 5 to 10 years is strong. Price and cost information for the toys of age group of 5 to 10 years is as follows: **07**

Price	Rs.220
Direct materials	63
Direct labour	12.50
Variable overhead	25
Fixed overhead	10

Fixed overhead is based on an annual budgeted amount of Rs.3,50,000 and budgeted production of 3,500 toys. The direct materials cost includes the cost of the raw material received from infant division at Rs.20 (market price).

The Durgapur plant capacity is 2,000 toys per year. Cost data are as follows:

Direct materials	Rs.7.50
Direct labour	6.00
Variable overhead	6.00
Fixed overhead	10.00

Fixed overhead is based on budgeted fixed overhead of Rs.2,00,000.

Required:

1. What is the maximum transfer price the Cochin plant would accept?
2. What is the minimum transfer price the Durgapur plant would accept?

- (b) Aadi Ltd. had the following inventories at the beginning and at the end of the month of September 2009: **07**

Particulars	September 1, 2009 (Rs.)	September 30, 2009 (Rs.)
Finished goods	1,25,000	1,17,000
Work-in-process	2,35,000	2,51,000
Direct materials	1,34,000	1,24,000

The following additional manufacturing data were available for the month of September 2009:

Particulars	(Rs.)
Direct materials purchased	1,89,000
Purchase returns	1,000
Carriage inward	3,000
Direct labour	3,00,000
Actual factory overhead	1,75,000

The company applies factory overhead at a rate of 60% of direct labour cost, and any over applied or under applied factory overhead is deferred until the end of the year 2009-10.

Calculate the manufacturing cost of the company for the month of September 2009.

OR

- (b) AB Ltd is organized into two large divisions – A and B. Division A produces a component which is used by division B in making a final product. The final product is sold for Rs.480. Division A has a capacity to produce 2,400 units and the entire quantity can be purchased by division B. **07**

Division A informed that due to installation of new machines, its depreciation cost has gone up and hence wanted to increase the price of the component to be supplied to division B at Rs.264. Division B, however, can buy the component from the outside market at Rs.264 each. The variable cost of division A is Rs.228 and fixed cost is Rs.24 per component. The variable cost of division B in manufacturing the final product by using the component is Rs.180 (excluding the component cost). If division B purchases the entire component from division A. Calculate the total contribution of the company.

- Q.3** (a) Explain the difference between the cost accountancy, costing and cost accounting. **07**

- (b) Aashish timber merchant purchased 1,000 cubic foot of timber logs on April 01, 2009 at the rate of Rs.100 per cubic ft and stored them in his timber yard for six months for seasoning. In the timber yard the following items of expenses were incurred during the period of six months of seasoning. **07**
- Rent –Rs. 1,250 per month
 Salaries of 4 guards at the rate of Rs. 250 per month
 Incidental expenditure for maintenance, power, lighting, etc. Rs. 750 per month
 Annual share of administration overheads Rs. 10,000.

50% of the floor area of the godown and other connected operations were incurred for stocking the seasoned timber. Loss in volume of the logs due to seasoning should be taken at 10%.

If the timber merchant desires a profit of 15% on cost Work out the selling price of the seasoned timber per cubic ft.

OR

Q.3 (a) Elaborate in detail the methodology to be adopted for departmentalization of overhead expenses. How the activity based apportionment helps the organization to achieve the much precise level of cost compilation? Elaborate in detail. **07**

(b) The Nami Mani company ltd. Is divided into four department A,B, & C production department and D is service department. The actual costs for October, 2009 are as follows. **07**

	Rs.
Rent	1000
Repairs to plants	600
Depreciation of plant	450
Light	100
Supervision	1500
Fire insurance stock	500
Power	900
Employees state insurance contribution	150

The following information is available in respect of four departments.

Departments	A	B	C	D
Area sq ft.	1500	1100	900	500
No. of employees	20	15	10	5
Total wages Rs.	6000	4000	3000	2000
Value of plant Rs.	24000	18000	12000	6000
Value of stock Rs.	15000	9000	6000	-

Apportion the cost to the various departments by preparing overhead distribution chart.

Q.4 (a) What do you mean by job costing? Under what circumstances, the job costing suitable? Can the caterer use the job costing? If no, which method he should use? **07**

(b) The Pavapuri plant purchased Rs.2,75000 of direct materials during the May. Beginning direct materials inventory was Rs.16,000, and direct materials used in production were Rs.2,00,000. What is ending direct materials inventory? **03**

(c) Parshwa Company produced 10,000 units at an average cost of Rs.6 each. The beginning inventory of finished goods was Rs.3,510. (The average unit cost was Rs.5.85.) Parshwa sold 8,900 units. How many units remain in ending finished goods inventory? **04**

OR

Q.4 (a) APW Ltd. uses process cost system to manufacture Dust Density Sensors for the mining industry. The following pertains to operations for the month of March 2009: **07**

Particulars	Units
Opening work-in-process (March 01, 2009)	1,280
Introduced in production during March 2009	7,200
Closing work-in-process (March 31, 2009)	950

There is no loss in the manufacturing process. The opening inventory was 60% complete for materials and 50% complete for conversion costs. The closing inventory was 80% complete for material and 60% complete for conversion costs.

Costs pertaining to the month of March 2009 are as follows:

Particulars	Rs.
Opening work in process:	
Materials	20,500
Conversion	16,350
During the month:	
Materials	1,12,830
Conversion	89,520

Calculate the total cost of closing work-in-process on March 31, 2009, using FIFO method.

- (b) AB Ltd. has furnished the following data pertaining to its product at 40% capacity level, which is its break-even level: **07**

Particulars	Rs.
Selling price per ton	69.50
Variable cost per ton	35.50
Fixed expenses	18,02,000

The company wants to increase the production by 40%. The selling price will be reduced by 10% for first 20% additional production and 15% of original selling price for next 20% additional capacity. Work out the profit for additional 40% capacity level.

- Q.5 (a)** HP Ltd. has furnished the following information pertaining to its 3 products: **07**

Department	Allocation Base	Product A	Product B	Product C	Overhead costs
Production	Machine Hours	1,000	2,000	500	Rs.14,00,000
Purchasing	Purchase Orders	100	300	150	Rs. 5,00,500
Inspection	Labour Hours	200	200	200	Rs. 3,00,000

Assuming overhead is allocated based on activities, using ABC basis, how much would be allocated to Product B?

- (b) Sita Plastics Ltd. manufactures plastic chairs. The company is working at 60% capacity level, which represents 4,800 chairs per month. The cost break-up per chair is as under: **07**

Materials – Rs.62
 Labour – Rs.32
 Overheads – Rs.40 (60% fixed)

The selling price is Rs.180 per chair. The company is planning to produce at 80% capacity level. At 80% capacity level the selling price falls by 5% accompanied by a similar fall in the price of materials. Calculate the break-even point in units and profit at 80% level of capacity.

OR

- Q.5 (a)** Presidency Club is involved in providing staying facilities and Gym facilities to its members. It has a capacity of 25 single rooms and 15 double rooms and the gym facility is provided for residents in the club and also outsiders. The club has furnished the following cost structure: **07**

Service	Variable cost per day
Single Room	Rs.65
Double Room	Rs.45
Gym facility	Rs.50

The fixed cost per day is:

For single room – Rs.25
 For double room – Rs.35
 For Gym – Rs.10

The average occupancy rate in the club is 80% for 365 days of the year. The club deserves a margin of 25% on hire of room and the rent of double room should be fixed at 150% of a single room. Work out the rent of a double room per day.

- (b) Distinguish between scrap, spoilage, and defectives in a restaurant industry with specific reference to accounting treatment for each. **07**
