PRIME ACADEMY
FINAL - 41st SESSION PROGRESS TEST
ADVANCED MANAGEMENT ACCOUNTING

No of pages: 4 **Total Marks: 75**
Time Allowed: 2 Hrs

PART - A

(25 Marks)

I. Write short notes on the following:

1. The areas in which the differential cost techniques of cost analysis can be used for making managerial decisions
2. Committed cost and conversion cost
3. CVP analysis
4. Relevant cost and replacement cost
5. Under or over absorption of overhead **(5 x 3 =15 Marks)**

II. State true or false along with reasons :

1. All variable costs are relevant costs
2. Marginal cost represents increase or decrease in total costs
3. Sunk costs are relevant for decision making.
4. A New advertisement for existing products recommended by the Marketing Department for achieving sales quantities that were budgeted for at the beginning of the year is a committed cost
5. If the company decides to expand its capacity, additional fixed overheads should be considered. **(5 x 2 = 10 Marks)**

PART - B **(50 Marks)**

1.

(a) PQ Limited manufactures and sells a range of products. For one of its products, it makes 2,000 units of a component which has the following budgeted manufacturing cost:

Cost per unit	(₹)
Direct materials	8,000
Direct Labour (specially skilled) (40 hours @ ₹ 150 per hour)	6,000
Variable overhead (40 hours ₹ 75 per labour)	3,000
Allocated Fixed overhead	10,000
Total production cost	27,000

Softech Limited has offered to supply the component at a guaranteed price of ₹ 25,000 per unit. If the component is not manufactured by PQ Limited, all the direct labour thus released can be employed in increasing the production by 1,600 units of an existing product K, which uses 50 of this type of direct labour hours per unit. K is sold for ₹ 45,000 per unit and has a marginal cost of production of ₹ 30,000 per unit and has sufficient market demand. The direct labour force cannot be retrenched or recruited for the next two production periods. From a financial perspective, using incremental cost analysis, would you advise PQ Ltd. to make or buy the component for the forthcoming production period? **(5 Marks)**

(b) A review, made by the top management of XYZ ltd., (which makes only one product), of the result of the first quarter of the year revealed the following:

	(₹)
Sales (in units)	10,000
Loss	10,000
Fixed cost (for the year ₹ 1,20,000)	30,000
Variable cost/unit	8.00

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The finance Manager, who feels perturbed, suggests that the company should at least break even in the second quarter with a drive for increased sales. Towards this, the company should introduce better packing, which will increase the cost by re. 0.50 per unit. The Sales Manager has an alternative proposal. For the second quarter, additional sales promotion expenses can be increased to the extent of ₹ 5,000 and a profit of ₹ 5,000 can be aimed at during the period with increased sales. The production Manager feels otherwise. To improve the demand, the selling price/ unit has to be reduced by 3%. As a result, the sales volume can be increased to attain a profit level of ₹ 4,000 for the quarter. The Manager Directors asks you to evaluate the three proposals and to calculate the additional sales volume that would be required in each case, in order to help him to take a decision. **(5 Marks)**

2.

(a) S Ltd engaged in manufacturing activities. It has received a request from one of its important customers to supply a product which will require conversion of Material M, which is a non moving item. The following details are available:

- Book Value of Material M ₹60
- Realizable value of Material M ₹ 80
- Replacement Cost of Material M ₹ 100

It is estimated that conversion of one unit of M into one unit of finished product will require one unit of labour hour. At present labour is paid @ ₹ 20 per hour. Other costs are as follows:

- Out of Pocket Expenses ₹ 30 per unit
- Allocated Overheads ₹ 10 per unit

The labour will be re-deployed from other activities. It is estimated that the temporary redeployment will not result in loss of contribution. The employees to be redeployed are permanent employees of the Co. Estimate the minimum price to be charged from the customer so that the company is not worse off by executing the order. **(5 Marks)**

(b) A research project, to date, has cost a company ₹ 1,25,000 and is under review. It is anticipated that, should the project be allowed to proceed, it will be completed in about one year and can be sold for ₹ 2,00,000. The following additional information is available:

(i) Materials have just been received for ₹ 30,000. These are extremely toxic, and if not used in the project, have to be disposed of by special means at ₹ 7,500.

(ii) Labour: ₹ 37,500. The men are highly skilled. If they are released from the Research Project, they may be transferred to the Works Department of the company and consequently the sales could increase by ₹ 75,000. The accountant estimates that the prime cost of those sales would be ₹ 50,000 and the overhead absorbed (all fixed) would amount to ₹ 12,500.

(iii) Share of General Building Expenses: ₹ 17,500. The Managing Director is not sure what is included in this amount, but the accounts staff charge similar amounts each year to each department.

You are required to advise whether the project should be allowed to proceed and explain the reasons for the treatment of each of the amounts above in your analysis. **(5 Marks)**

3.

(a) Maruthi Agencies has received an order from a valuable client for supplying 3,00,000 pieces of a component at ₹ 550 per unit at a uniform rate of 25,000 units a month. Variable manufacturing costs amount to ₹ 404.70 per unit, of which direct materials is ₹ 355 per unit. Fixed production overheads amount to ₹ 30 lacs per annum, including depreciation. There is a penalty/reward clause of ₹ 30 per unit for supplying less/more than 25,000 units per month. To adhere to the schedule of supply, the company procured a machine worth ₹ 14.20 lacs which will wear out by the end of the year and will fetch ₹ 3.55 lacs at the year end. After this supply of machine, the supplier offers another advanced machine which will cost ₹ 10.65 lacs, will wear out by the year end and not have any resale value.

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If the advanced machine is purchased immediately, the purchaser will exchange the earlier machine supplied at the price of the new machine. Fixed costs of maintaining the advanced machine will increase by ₹ 14,200/- per month for the whole year. While the old machine had the capacity to complete the production in 1 year, the new machine can complete the entire job in 10 months. The new machine will have material wastage of 0.5% . Assume uniform production throughout the year for both the machines. Using incremental cost/revenue approach, decide whether the company should opt for the advanced version. **(5 Marks)**

(b) G Ltd. produces and sells 95,000 units of 'X' in a year at its 80% production capacity. The selling price of product is ₹ 8 per unit. The variable cost is 75% of sales price per unit. The fixed cost is ₹ 3,50,000. The company is continuously incurring losses and management plans to shut-down the plant. The fixed cost is expected to be reduced to ₹ 1,30,000. Additional costs of plant shut-down are expected at ₹ 15,000. Should the plant be shut-down? What is the capacity level of production of shut-down point? **(5 Marks)**

4. Neelgagan Ltd. manufactures a range of products which it sells through manufacturer's agents to whom it pays commission of 20% of the selling price of the products. Its budgeted profit and loss statement for 2013 is as follows:

	(₹)
Sales	22,50,000
Prime Costs and Variable Overhead	7,87,500
Fixed Overhead	3,62,500
Selling Costs:	
Commission to Manufacturer's Agents	4,50,000
Sales Office Expenses (Fixed)	20,000
Administration Costs (Fixed)	3,00,000
Profit	3,30,000

Subsequent to the preparation of the above budgeted profit and loss statement, the company is faced with a demand from its agents for an increase in their commission to 22% of selling price. As a result, the company is considering whether it might achieve more favorable results it were to discontinue the use of manufacturer's agents and, instead employ its own sales force. The costs that this could involve are budgeted as follows:

	(₹)
Sales Manager (Salary and Expenses)	75,000
Salesmen's Expenses (including Travelling Costs)	20,000
Sales Office Costs (additional to Present Costs)	50,000
Interest and Depreciation on Sales Department Cars	35,000

In addition to the above, it will be necessary to hire four salesmen at a salary of ₹ 40,000 per annum each plus commission of 5% on sales plus car allowance of ₹ 1 per kilometre to cover all costs except interest and depreciation. On the assumption that the company decide to employ its own sales force on the above terms, you are required to ascertain:

(a) What is the maximum average kilometre per annum that salesmen could travel if the Company is to achieve the same budgeted profit as would have obtained by retaining the manufacturer's agents and granting them the increased commission they had requested. Assume that sales in each case would be as budgeted.

(b) At what level of sales would the original budgeted profit be achieved if each salesman were to travel an average of 14,000 kilometres per annum. Assume that all other assumptions inherent in the budgets were maintained. **(10 Marks)**

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5. Tim-Tim Ltd. is manufacturing three products. The cost details are as follows:-

Particulars	Product A (₹)	Product B (₹)	Product C (₹)
Selling Price	35	40	50
Direct Materials (₹ 3 per unit)	12	15	18
Direct Labour	5	6	6
Direct Expenses	8	9	11
Contribution	10	10	15
No. of Units Sold	20,000	40,000	20,000
Contribution	2,00,000	4,00,000	3,00,000
Total Contribution			9,00,000
Less: Fixed Cost			7,50,000
Profit			1,50,000

The direct materials were all imported. Due to foreign exchange restrictions, henceforth, the company can import only 3,00,000 units of raw materials. The company can produce in all 1,00,000 units maximum (all products). However, they can market only 20,000 units of products A & C each. There is a local substitute material which is available at a price of ₹ 3.75 per unit. Besides, the company has to spend ₹ 50,000 on intermediaries and consumables, if local substitute material is used in the production process. There was also a third party who was willing to take a part of the plant on lease up to 50,000 units capacity of B and willing to pay lease charges of ₹ 2,75,000. You are required to advise the management:

(i) What should be the quantum of production/sales mix of products with existing import restrictions?

(ii) Whether the company can optimize production of 1,00,000 units with local substitute materials?

(iii) Whether the company can enhance profits by leasing out a part of the plant to the third party and restricting its own production? **(10 Marks)**

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