P10_Practice Test Paper_Syl12_Dec13_Set 2

Paper 10 : Cost and Management Accountancy

Full Marks: 100 **Time : 3 hours**

1. Answer all questions :

(i) From the following particulars, write up Contract Account and find out the value of tender (contract) price: Materials use ₹ 30,000; Productive wages ₹ 25,000; Direct expenses ₹ 500; Provide 60% on productive wage for works overhead and 12 ½ % on works cost for office overhead. Profit to be realized 15% on the tender price. (3)

(ii) What are equivalent unit of production ? (2)

(iii) A company prepares a budget for a production of 2,00,000 units. Variable cost per unit is ₹ 15 and the fixed cost is ₹ 2 per unit. The company fixes its selling price to fetch a profit of 10% on cost.
What is the break-even point ? (both in units and ₹) (3)

(iv) Depreciation charged in costing books is ₹ 12,500 and in financial books is ₹ 11,200. What will be the financial profit when costing profit is ₹ 5,000? (2)

(v) How will you treat Cenvat availed as credit on purchased raw materials in the Cost Accounting Records ? (2)

(vi) A company manufactures various types of the product. As a Cost Auditor would you accept the absorption of "Selling and Distribution" expenses as a percentage on Sales Values. (2)

(vii) Demand for a product refers to (1)
- (i) Various quantities that are demanded by consumers.
- (ii) Various amounts desired by consumers.
- (iii) Total quantity of a product demanded during a given period of time.
- (iv) Total quantity of a product demanded at a particular price in the market during a given period of time.

(viii) A firm operating under conditions of perfect competitions can (1)
- (i) Determine the price of its product.
- (ii) Determine only the size of its output.
- (iii) Promote the sales through effective advertisement.
- (iv) Capture the market by cutting down the price.

(ix) The production function is given by $q = \sqrt{L}$. The output is sold in a competitive market at ₹ 10. What is the firm's short run demand curve? (4)

Section A – Answer any two questions from this section

2. **(a)** A Club runs a library for its members. As part of club policy, an annual subsidy of upto ₹ 5 per member including cost of books may be given from the general funds of the club. The management of the club has provided the following figures for its library department.

Number of Club members	5,000
Number of Library members	1,000
Library fee per member per month	₹100
Fine for late return of books	Re. 1 per book per day
Average No. of books returned late per month	500
Average No. of days each book is returned late	5 days
Number of available old books	50,000 books
Cost of new books	₹ 300 per book
Number of books purchased per year	1,200 books
Cost of maintenance per old book per year	₹10

Staff details	No.	Per Employee Salary per month (₹)
Librarian	01	10,000
Assistant Librarian	03	7,000
Clerk	01	4,000

You are required to calculate:

(i) The cost of maintaining the library per year excluding the cost of new books;

(ii) The cost incurred per member per month on the library excluding cost of new books; and

(iii) The net income from the library per year.

If the club follows a policy that all new books must be purchased out of library revenue (a) What is the maximum number of books that can be purchased per year and (b) How many excess books are being purchased by the library per year?

Also, comment on the subsidy policy of the club. (2+2+2+2+1=9)

(b) The following data are available in respect of Process 1 for February 2013 :

(i) Opening stock of work in process : 800 units at a total cost of ₹ 4,000.

(ii) Degree of completion of opening work in process:

Material	100%
Labour	60%
Overheads	60%

(iii) Input of materials at a total cost of ₹ 36,800 for 9,200 units.

(iv) Direct wages incurred ₹ 16,740

(v) Production overhead ₹ 8,370.

(vi) Units scrapped 1,200 units. The stage of completion of these units was:

Materials	100%
Labour	80%
Overheads	80%

(vii) Closing work in process; 900 units. The stage of completion of these units was:

Material	100%
Labour	70%
Overheads	70%

(viii) 7,900 units were completed and transferred to the next process.

(ix) Normal loss is 8% of the total input (opening stock plus units put in)
(x) Scrap value is ₹ 4 per unit.

You are required to :

I. Compute equivalent production,
II. Calculate the cost per equivalent unit for each element.
III. Calculate the cost of abnormal loss (or gain), closing work in process and the units transferred to the next process using the FIFO method,
IV. Show the Process Account for February 2013. (3+2+4+2=11)

3. ABC Ltd., a manufacturing company having a capacity of 60,000 units, has prepared a following Cost Sheet:

Particulars	₹
Direct material (per unit)	12.50
Direct wages (per unit)	5.00
Semi-variable cost	30,000 fixed plus 0.50 per unit
Factory overhead (per unit)	10.00 (50% fixed)
Selling and Administration overhead (per unit)	8.00 (25% variable)
Selling price (per unit)	40.00

During the last year the sales volume achieved by the company was 50,000 units. The Company has launched an expansion program as under –

(i) Capacity will be increased to 1,00,000 units.
(ii) Cost of investment on expansion is ₹5 lakhs, which is proposed to be financed through Financial Institution at 12% p.a.
(iii) Depreciation rate of new investment is 10% based on Straight-Line method.
(iv) Additional fixed overhead will be ₹ 2 lakhs upto 80,000 units, and will increase by ₹ 80,000 more beyond 80,000 units

After the expansion, the company has two alternatives for operating the expanded plain as under –

(i) Sales can be increased upto 80,000 units by spending ₹ 50,000 on special advertisement campaign to explore new market.
(ii) Sales can be increased upto 1,00,000 units subject to the following –
  (a) Reduction of selling price by ₹ 4 per unit on all the units sold.
  (b) The direct material cost would go down by 4% due to discount on bulk buying
  (c) Increasing the variable selling and administration expenses by 4%.

Required :

(i) Construct a Flexible Budget at the level 50,000 units, 80,000 units and 1,00,000 units of production and select the best profitable level of operation.
(ii) Calculate Break Even Point both before and after expansion. (20)

4. (a) The financial records of Modern Manufacturers Ltd. reveal the following for the year ended 30-6-2012:

	₹ in thousands
Sales (20,000 units)	4,000
Materials	1,600
Wages	800
Factory Overheads	720
Office and Administrative Overheads	416
Selling and Distribution Overheads	288

Finished Goods (1,230 units)		240
Work-in-progress	48	
Labour	32	
Overheads (Factory)	32	112
Goodwill written off		320
Interest on Capital		32

In the Costing records, factory overhead is charged at 100% wages, administration overhead 10% of factory cost and selling and distribution overhead at the rate of ₹ 16 per unit sold.

Prepare a statement reconciling the profit as per cost records with the profit as per financial records of the company. (10)

(b) A company has produced 1,500 units against a budgeted quantity of 2,000 units. Actual sales were 1,300 units. The company's policy is to value stocks at standard absorption cost. Other data are –

Particulars	₹	Particulars	₹
Direct material	100 per unit	Variable selling OH	26,000
Direct labour	100 p.u. at normal efficiency	Budgeted fixed selling OH	30,000
Variable OH	50 per unit	Actual fixed selling OH	25,000
Fixed OH at budgeted capacity	1,00,000	Selling price	400 p.u.

There was no opening stock.

(i) Present the profitability statement under Absorption Costing System.

(ii) Assuming actual labour was 25% below normal efficiency, and that 100 units of production had to be scrapped after complete manufacture, compute the actual profit or loss.

(iii) Reconcile the profits under (i) and (ii) above. (4+4+2 =10)

Section B – Answer any one question from this section

5. (a) How will you treat the following items in Cost Accounting Records ?

(i) Interest received on security deposit with the Electricity Board.

(ii) Voluntary Retirement Compensation paid to workers, included under wages

(iii) Cenvat availed as credit on purchased raw materials

(iv) Profit on sale of fertilizers to cane-growers by a sugar company. (4)

(b) There was a strike from 17.08.2012 to 28.10.2012 in a company of which you are a Cost Auditor for the year ended 31.03.2012. Although the company began working from 29.10.2012 production could effectively begin only from 30.11.2012. The expenses incurred during the year ended 31.03.2012 were :

	₹ in lakhs
Salaries & wages (Direct)	3,000
Salaries & wages (Indirect)	2,000
Power (variable – 90%)	1,200
Depreciation	1,800
Other fixed expenses	2,400
Repairs and maintenance (variable ₹ 1,100 lakhs)	1,400
Total	11,800

The following relate to the period 17.08.2012 to 29.11.2012.

Salaries & wages (Indirect)		700
Depreciation (non-productive)		600
Other fixed expenses		900
Repair & maintenance (Indirect)		100
	Total	2,300

Calculate the amount which, in your opinion, should be treated as abnormal for exclusion from the Product Costs. (8)

(c) Give your understanding on flow chart. (4)

6. (a) Following data is available for a company relating to the cost of production of a product subjected to Cost Audit. Prepare the Export Profitability Statement to be included in the Annexure to the Cost of Production of 10,000 units.

	₹
Sales(local) 9000 units	2,02,500
Sales (export) 1000 units	20,000
Material consumed 20 tonnes @₹ 5 kg.	1,00,000
Imported Component @ ₹ 3/unit	30,000
Direct Labour	10,000
Factory Overhead	15,000
Administrative Overhead	5,000
Freight & Packing (local sales)	4,500
Packing for export	2,000
Handling at port	500
Opening Work-in-progress	10,000
Closing Work-in-progress	5,000

Additional Information :

(i) Export incentive of 10% on F.O.B is receivables.

(ii) Draw Back on duty paid on raw materials and components available on export is ₹ 2,500/. (8)

(b) In dealing with the financial position of a company as per para 24 of the Annexure to the Cost audit Report, state your opinion regarding :

(i) Is the Capital Employed to be computed as at the beginning of the accounting period or at the end of the accounting period or average of both?

(ii) Should investments like National Savings Certificates deposited with Government authorities for Sales Tax, Excise etc. as security be treated as investments outside the business?

(iii) How is 'net worth' defined in this para? The para also states "if there is any change in the composition of the net worth during the year, special mention may be made along with the reasons there for." How would you take care of this provision?

(iv) Should the net sales figure include other service charges and jobbing income (4 x 2)

Section C – Answer any two from this section

7. **(a)** Define the cost function from the given information. (4)

Volume of activity	Output Level (Units)	Total Cost
High	2500	8000
Low	1200	4100

(b) What is demand forecasting ? (4)

(c) Define Managerial Economics. (4)

8. **(a)** Why does demand curve slopes downward? (6)

(b) An industry has 100 firms. 50 are located in Haldia and 50 firms are located in Durgapur. The output is sold in Calcutta, the transportation cost is ₹6 from Haldia to Calcutta and ₹10 from Durgapur to Calcutta. The cost function of all firms is same and in given by TC = $\frac{1}{2}q^2$. The industry demand is given by $1400 - 10P_0$.

(i) What is the price charged?
(ii) What is the output supplied by each firm?
(iii) What are the amounts of profit earned by each firm? (6)

9. **(a)** Let the demand curve be $q = \frac{10}{q}$ and $C = 5 + 2q + 5q^2$ if the objective of the firm is profit maximization only, will the firm produce? (4)

(b) For a monopolist, the demand curve is q = 100 – 2q and total cost(c) = 0.05q 2 2q + 300. Find profit maximizing output & price. (4)

(c) How income elasticity helps in business decision? (4)