

INTERMEDIATE EXAMINATION

December 2014

P-10(CMA)
Syllabus 2012

Cost & Management Accountancy

Time Allowed: 3 Hours

Full Marks: 100

The figures in the margin on the right side indicate full marks.

This paper contains four questions.

All questions are compulsory, subject to instruction provided against each question.

All workings must form part of your answer. Assumptions, if any, must be clearly indicated.

Please (i) Write answers to all parts of a question together.

(ii) Open a new page for answer to a new question.

(iii) Attempt the required number of questions only.

1. Answer all questions.

2×10=20

(a) MENZ LTD. earned a profit of ₹ 3,00,000 during the year 2013-14. If the marginal cost and selling price of a product are ₹ 80 and ₹ 100 per unit respectively, find out the amount of 'Margin of Safety'.

(b) BEEU LTD. operates throughput accounting system. The details of Product-X per unit are as under:

Selling price	₹ 50
Material cost	₹ 20
Conversion cost	₹ 15
Time on Bottleneck resources	10 minutes

What would be the return per hour for Product-X?

(c) A factory transferred out 8,800 completed units during November'14. Opening stock was 400 units 75% completed; Closing stock was 800 units 50% completed. Assuming FIFO method, what is the equivalent production in November 2014?

(d) In a factory repairs and maintenance expenses were ₹ 1,50,000 at 60% capacity level out of these 40% was fixed. Calculate the repairs and maintenance expenses for the capacity level of 80%.

(e) State the main advantages of Integrated Accounting System.

(f) Differentiate between Cost Accounting Policy and Cost Accounting System.

(g) Whether cost consultant of a company can issue compliance certificate to the same company?

(h) The cost (C) of a firm is given by the function $C = 4X^3 + 8x^2 + 10x + 20$, (where x is the output). Find the Average cost, Marginal cost, Average variable cost and Average fixed cost.

(i) What is law of variable proportions?

(j) MESCAB LTD. is operating in a perfectly competitive market. The price elasticity of demand and supply of the product estimated to be 6 and 4 respectively. The equilibrium price of the product is ₹ 120. If the Government imposes a specific Tax of ₹ 10 per unit, what will be the new equilibrium price?

Please Turn Over

2. Answer any two questions (Carrying 20 marks each):

- (a) (i) The following information pertains to labour force of UDHAMI LTD. engaged in a week of November 2014 for a JOB-PH.

	Skilled	Semi-skilled	Unskilled	Total
No. of workers in standard gang:	16	12	8	36
Standard rate per hour (₹)	60	30	10	—
No. of workers in actual gang:	—	—	—	—
Actual rate per hour (₹)	70	20	20	—

In a 40 hours week, the gang produced 1080 standard hours. The actual number of semi-skilled workers is two times of the actual number of unskilled workers. Total number of actual workers are same as standard gang. The rate variance of semi-skilled workers is ₹ 6400 (F).

You are **required** to find the following:

- (a) The actual number of workers/labours in each category.
 (b) Labour gang (mix) variance.
 (c) Labour sub-efficiency variance.
 (d) Labour rate variance.
 (e) Labour cost variance. [(2+1×4)+4]=10
- (ii) BATRON LTD., a contractor commences the contract No. HB-108 on 1st July, 2013. The details about the contract for the year ending 31st March, 2014 were following:

	(₹)
Contract Price	3,000,000
Materials issued	800,000
Material transferred from contract no. 101	50,000
Wages paid	631,000
Wages outstanding	35,000
Supervisor's Salary	180,000
Establishment Exp.	41,000
Plant Issued	1,000,000

Material costing ₹ 15,000 was sold for ₹ 11,000 and plant costing ₹ 80,000 returned to stores on 31st December, 2013.

A crane costing ₹ 2,000,000 has been on the contract site for 73 days. Its working life is estimated at 6 years and its scrap value at ₹ 110,000. Depreciation on plant is to be charged @ 15% per annum. Up to 31st March, 2014, 3/4(Three-fourth) of the contract was completed but architect's certificate has been issued covering 2/3 of the contract price and 15,00,000 had been received in cash on account.

Required:

- (a) Prepare the Contract No. HB-108 Account for the year ended March 31, 2014.
 (b) State as to how much Profit should be credited to Profit and Loss Account for the year ended March 31, 2014. (8+2)=10

- (b) (i) BHUMIKA LTD. a manufacturing company, presently sells an equipment for ₹ 75,000. Increase in prices of labour and material cost are anticipated to the extent of 20% and 10% respectively. At present material cost represents 40% of cost of sales and labour cost 30% of cost of sales. The remaining relates to overheads.

If the existing selling price is retained, despite the increase in labour and Material prices the company would face a 20% decrease in the existing amount of Gross Profit on the equipment.

Required:

- (a) Prepare a statement of Profit and Loss per unit of equipment at present.
 (b) Compute the new selling price and cost of sales to produce the same percentage of profit to cost of sales as before. (4+3+3)=10
- (ii) DKB FACTORY LTD. has a key resource (bottleneck) of facility AX which is available for 58000 minutes per week.

Budgeted factory costs and data on two products P and Q are shown below:

Product	Selling Price/ Unit (₹)	Material Cost per unit (₹)	Time facility AX
P	50.00	32.00	6 Minutes
Q	50.00	26.00	12 Minutes

Budgeted factory costs per week:

	(₹)
Direct labour	48000
Indirect labour	23650
Power	3150
Depreciation	40500
Space costs	14400
Engineering	6300
Administration	9000

Actual production during the last week is 7300 units of product P and 1050 units of product Q. Actual factory cost was ₹ 145000.

You are **required to calculate:**

- (1) Total factory costs (TFC).
- (2) Cost per factory Minute.
- (3) Return per factory Minute for both products.
- (4) TA ratios for both products.
- (5) Throughput cost per week.
- (6) Efficiency ratio.

$$(1\frac{1}{2}+1+2+2+2+1\frac{1}{2})=10$$

Please Turn Over

- (c) (i) The following data extracted from the records of DHOORA LTD. are given to you:

Particulars	Year 2013-14	
	First six months (₹)	Second six months (₹)
Cost of sales	10,50,000	15,30,000
Profit/Loss (-)	(-) 50,000	2,70,000

You are **required to calculate** for the year 2013-14:

- (1) P/V Ratio
- (2) Fixed cost
- (3) BEP
- (4) The amount of profit where sales are ₹ 25,00,000
- (5) Amount of sales required to earn a profit of ₹ 6,50,000
- (6) Amount of sales required to earn a profit of 25% on cost.

(2+1+1+1+1+2)=8

- (ii) DEFALI LTD. wishes to prepare cash budget for the period of December, 2014 to March, 2015. The Budgeted/Estimated Revenue and Expenses for the said period extracted from the records of the Company are as follows:

(Amount in ₹ Lakh)

Months	Total Sales (₹)	Purchases (Materials) (₹)	Wages (₹)	Expenses (Overheads)
September, 2014	80	45	20	4
October, 2014	80	50	22	5
November, 2014	75	52	18	6
December, 2014	90	60	20	6
January, 2015	85	40	18	8
February, 2015	80	35	15	9
March, 2015	95	46	24	9.5

You are further informed that:

- (i) 20% of purchases and the 30% of sales are for cash;
- (ii) Realisation is made from debtors 30% in the month of sale, 50% in the month of following that and the balance in the month after that;
- (iii) The credit purchases are paid of regularly after one month;
- (iv) Wages are paid half monthly;
- (v) Rent of ₹ 50,000 per month included in expenses is paid monthly and remaining expenses are paid half monthly;
- (vi) Cash and bank balance as on 1st December, 2014 was ₹ 10,00,000 and the company wants to keep it at the end of every month below ₹ 10,00,000 but not less than ₹ 9,00,000, the excess cash being put in fixed deposit in multiples of ₹ 1,00,000.

Required:

Prepare A CASH BUDGET for the four months ending March 31, 2015.

3+3+2+(2+1+1)=12

3. Answer any two questions (Carrying 8 marks each):

- (a) (i) State the provisions of the companies (Cost Accounting Records) Rules 2011, regarding preparation of the compliance report. 6
- (ii) A company has been in existence since 1992 and is covered under cost audit for the first time in 2013-14.
Whether it is mandatory to indicate previous figures while submitting the reports? 2
- (b) (i) Whether all manufacturing companies having turnover exceeding ₹ 100 crores and or listed in a stock exchange are covered under companies (cost audit report) Rules 2011 and get cost audit conducted? 3
- (ii) Is it Mandatory to Submit Performance Appraisal Report to Company Management or can it be a NIL Report?
Can Form III relating to Performance Appraisal Report be modified or it has to be strictly followed as prescribed? 5
- (c) Briefly explain the objectives of the Cost Audit. 8

4. Answer any three questions (Carrying 8 marks each):

- (a) (i) How is the price determined by a firm under Oligopoly? 4
- (ii) The demand function for a particulare brand of Pocket Calculators is $P = 75 - 0.3Q - 0.05 Q^2$.
Find the consumers' surplus at the quantity (Q) of 15 calculators. 4
- (b) (i) Calculate the trend values by the method of least squares from the date given below and estimate the sales demand of milk for the year 2015-2016. 5

Year	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Sale of milk (in lakh litres)	20	25	27	35	38	41

- (ii) PARU Enterprise can sell 'X' items ($X \geq 0$) at a price of $(650 - x)$ each. The cost of Producing 'X' items is ₹ $(x^2 + 10x + 12)$. How many items should be sold to make the maximum profit? 3
- (c) What are the factors to be considered while setting the price of a PRODUCT? 8
- (d) (i) The total cost of daily output of Q tonnes of coal is ₹ $(\frac{1}{10} q^3 - 3q^2 + 50q)$. What is the value of q, when average cost is minimum? Verify that at this level, Average Cost = Marginal Cost. 2+2=4
- (ii) State what are the different types of income elasticity of demand? 4