CWA ICWA Inter Stage I: Cost and Management Accounting - June 2009

1—5(CMA)
Revised Syllabus

Time Allowed : 3 Hours | Full Marks : 100

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

Answer Question No. 1 carrying 20 marks and any five from the rest each carrying 16 marks.

Marks

1. (a) State if each of the following statements is T (= true) or F (= false): 1x5

(i) A blanket overhead rate is a single overhead rate computed for the entire factory.

(ii) A production order is in order received from the customer.

(iii) Process accounts should always be presented in conventional 'T' forms.

(iv) Opportunity costs are out–of–packet costs.

(v) Marginal costing is basically relevant for short-term decision making.

(b) Each of the following sums gives four possible answers. Find the correct answer. Show working in support of your chosen answer: 2x5=10

(i) Fixed cost of operating Plant A is Rs.30,000, while the variable cost is Rs.4 per unit. For Plant B of the same firm the variable cost per unit of identical product is Rs.3 but its fixed cost amounts to Rs.40,000 for the same period. At what production level will the total cost of production be same for both the plants?

(A) 8,000 units

(B) 10,000 units

(C) 11,000 units

(D) 12,000 units

(ii) A hospital's records show that the costs of carrying out health checks in the last five accounting periods have been as follows:

Period	No. of patients seen	Total cost (Rs.)
1	650	17,125
2	940	17,800
3	1,260	18,650
4	990	17,980
5	1,150	18,360

Using the high–low method and ignoring inflation, the estimated cost of carrying out health checks on 850 patients in period 6 is

(A) Rs.17,515

(B) Rs.17,570

(C) Rs.17,625

(D) Rs.17,680

(iii) Budgeted variable overheads of a factory was Rs.12,000 per month and budgeted production was 3,000 units. During a month, actual production was 3,200 units and variable overhead expenses amounted to Rs.12,500. Variable production overhead variance for the month was

(A) Rs.800 favorable

(B) Rs.500 favorable

(C) Rs.300 adverse

(D) Rs.300 favorable.

(iv) A K Chemicals produces high quality plastic sheeting in a continuous manufacturing operation. All materials are input at the beginning of the process. Conversion costs are incurred evenly throughout the process. A quality control inspection occurs 75% through the manufacturing process, when some units are separated out as inferior quality. The following data are available for May:

Materials costs	Rs. 90,000
Conversion costs	Rs. 70,200
Units started	40,000
Units completed	36,000

There is no opening or closing work – in – progress. Past experience indicates that approximately 7.5% of the units started are found to be defective on inspection by quality control. The cost of abnormal loss for May is then

(A) Rs.3,600

(B) Rs.4,050

(C) Rs. 4,680

(D) Rs. 10,800

(v) A limited has fixed costs of Rs.6,00,000 per annum. It manufactures a single product which it sells for Rs.200 per unit.

Its contribution to sale ratio is 40%.
A Limited's break–even point in units is

(A) 7,500

(B) 8,000

(C) 3,000

(D) 1,500

(c) From the following two groups of words match one capital letter with one small letter by their underlying relevance (any five): 1x5

Group I	Group II
A. Perpetual inventory	a. Operating cost
B. Point rating	b. Technique of cost reduction
C. Normal capacity	c. Profitability
D. Composite unit	d. Source and application of funds
E. Key factor	e. Stock control by maintaining records
F. Value analysis	f. Method of job evaluation
G. Debt equity ratio	g. Marginal costing
	h. Relates to overhead rates
	i. Tool for financial analysis

2. (a) The following particulars are extracted from the records of ABC Ltd: 10

	Per unit	
	Product A	Product B
Sales	Rs. 100	Rs. 120
Consumption of material	2 kg	3 kg
Material cost	Rs. 10	Rs. 15
Direct wages cost	Rs. 15	Rs. 10
Direct expenses	Rs. 5	Rs. 6
Machine hours used	3	2
Fixed overhead	Rs. 5	Rs. 10
Variable overhead	Rs. 15	Rs. 20

Direct wages per hour is Rs.5 Comment on the profitability of each product (both use the same raw material)when–

(1) Total sales potential in units is limited.
(2) Total sales potential in value is limited.
(3) Raw material is in short supply.
(4) Production capacity (in terms of machine hours) is the limiting factor.

Assume that only one constraint is effective at a time when other factors do not pose a problem.

(b) Assuming raw material as the key factor, availability of which is 10,000 6 kg, and maximum sales potential of each product being 3,500 units, find the product mix which will yield maximum profit for ABC Ltd.

3. The Trading and Profit & Loss Account of a company for the year ended 31st December, 2008 is as follows: 8+8

Particulars	Rs.	Particulars		Rs.
To Materials consumed	1,09,600	By Sales (2,400 units)		2,40,000
To Wages	60,400	By Stock of finished goods		6,400
To Factory Expenses	33,200	By Work–in–progress (80 units)		
To Administration Expenses	15,296	Materials	3,360	
To Selling & Distribution Expenses	18,000	Wages	1,440	
To Preliminary Expenses	1,400	Factory Expenses	800	5,600
To Interest on Loan	1,000			
To Net Profit	13,824	By Dividend received		720
	2,52,720			2,52,720

The company manufactures a standard unit. In the cost accounts, factory expenses have been charged to the production at 20% on prime cost; administration expenses at Rs.6 per unit on total units produced and selling and distribution expenses at Rs.8 per unit sold.

You are required to prepare

(a) the costing Profit and Loss Account of the company and (b) the reconciliation statement for reconciling the difference in the net profits as shown by the financial Profit and Loss Account and the costing Profit and Loss Account.

4. (a) Distinguish between 'operating costing' and 'operation costing'. 4

A transport company maintains a fleet of buses as follows:

No. of buses	Carrying capacity
10	60 passengers each
5	40 passengers each

(b) Each bus makes 4 trips (i.e. both upward and downward journeys in one trip) in a day, covering a distance of 5 kilometres in each one way journey in each trip. On an average, 75% of the seats are occupied in each trip. Assuming that the company operates its fleet 25 days in a month, ascertain operating cost passenger–kilometre, taking into account the following further information: 12

	Rs. Per month
Wages of 15 drivers	250 each
Petrol, Oil etc.	3,000
Repairs	1,500
Tyre, tube etc .	375
Depreciation	90,000
Garage rent	9,000
Interest on capital	12,000
General supervising charges	3,000

5. (a) Discuss the essential feature of a successful wage payment plan. 8

(b) The employees in a plastic toy making unit are paid wages at the rate of Rs.7 per hour for an eight hour shift. Each employee produces 5 units per hour. The overhead in this department is Rs.10 per direct labour hour. Employees and management are considering the following piece rate wage proposal: 8

Upto 45 units per day of 8 hours,	Rs.1.30 per unit
From 46 units to 50 units	Rs.1.60 per unit
From 51 units to 55 units	Rs.1.65 per unit
From 56 units to 60 units	Rs.1.70 per unit
Above 60 units	Rs.1.75 per unit

The working hours are restricted to 8 hours per day. Overhead rate does not change with increased production.
Prepare a statement indicating advantages to the employees as well as the management at production levels of 40, 45, 55 and 60 units.

6. The capital of Akshoy Ltd. is as follows: 4+4+4+4

	Rs.
9% Preference shares, Rs.10 each	4,00,000
Equity shares of Rs.10 each	10,00,000
	$\boxed{14,00,000}$

Additional information:

Profit (after tax at 33%)	Rs.3,60,000
Depreciation	Rs.80,000
Equity dividend paid	40 per cent
Market price of equity shares	Rs.80

You are required to compute the following, showing the necessary workings:

(a) Dividend yield on the equity shares,

(b) Cover for the preference and equity shares,

(c) Earnings per share,

(d) Price – earnings ratio.

7. The summarized profit and loss statement of Shivaji Ltd. for the last year is as follows: 5+3+8

		(In Rs. '000)
Sales (50,000 units)		1,000
Direct materials	350	
Direct wages	200	
Fixed production overhead	200	
Variable production overhead	50	
Administration overhead	180	
Selling and distribution overhead	120	1,100
Profit/(loss)		$\boxed{\text{Rs.(100)}}$

You are required as management assistant, to evaluate the following alternative proposals to improve the situation, and to comment briefly on each:

(a) Pay salesmen a commission of 10% of sales and thus increase sales to achieve break – even point.

(b) Reduce selling price by 10%, which it is estimated would increase sales volume by 30%.

(c) Increase sales by additional advertising of Rs.3,00,000, with an increased selling price of 20% , setting a profit margin of 10%.

8. Write short notes on any four of the following: 4x4

(a) Basic budget;

(b) Limitations of Inter–firm comparison;

(c) Administrative overhead;

(d) Machine–hour rate;

(e) Cost reduction;

(f) Zero – base budgeting.