CA PE - II :: Cost Accounting and Financial Management : May 2007

1. (a) Following details are related to the work done in Process 'A' of XYZ Company during the month of March, 2007: 2+3+2+3

Opening work in progress (2,000 units)	Rs.
Materials	80,000
Labour	15,000
Overheads	45,000
Materials introduced in Process 'A' (38,000 units)	14,80,000
Direct labour	3,59,000
Overheads	10,77,000

Units scrapped : 3,000 units
Degree of completion:

Materials	100%
Labour and overheads	80%

Closing work–in–progress : 2,000 units
Degree of completion

Materials	100%
Labour and overheads	80%

Units finished and transferred to Process 'B' : 35,000
Normal Loss:

5% of total input including opening work–in–progress
Scrapped units fetch Rs. 20 per piece.

You are required to prepare:

(i) Statement of equivalent production;
(ii) Statement of cost;
(iii) Statement of distribution cost; and
(iv) Process 'A' Account, Normal and Abnormal Loss Accounts.

(b) Explain briefly each of the following categories in Activity based Costing by giving at least two examples:

(i) Unit level activities
(ii) Batch level activities
(iii) Product level activities
(iv) Facility level activities

AT | Marks

2\. (a) What is 'Integrated Accounting System'? State its advantages. 4

(b) A Club runs a library for its members. As part of club policy, an annual subsidy of upto Rs. 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: 10

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

Staff details	No.	Per Employee Salary per month (Rs.)
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.

3\. (a) Raw materials 'AXE' costing Rs. 150 per kg and 'BXE' costing Rs. 90 per kg are mixed in equal proportions for making product 'A'. The loss of material in processing works out to 25% of the product. The production expenses are allocated at 40% of direct material cost. The end product is priced with a margin of 20% over the total cost. 8

Material 'BXE' is not easily available and substitute raw material 'CXE' had been found for 'BXE' costing Rs. 75 per kg. It is required to keep the proportion of the substitute material in the maxture as low as possible and at the same time maintain the selling price of the end product at existing level and ensure the same quantum of profit as at present.

You are required to compute the ratio of the mix of the raw materials 'AXE' and 'CXE'.

(b) Answer any three of the following: 2x3=6

(i) Explicit and Implicit Costs

(ii) Period Costs and Discretionary Costs

(iii) Efficiency Audit and Proprletary Audit

(iv) Bin Cards and Stock Control Cards.

4. (a) A company runs a holiday home, For this purpose, it has hired a building at a rent of Rs. 10,000 per month alongwith 5% of total talking. It has three types of suites for its customers, viz., single room, double rooms and triple rooms. 10

Following information is given:

Type of suite	Number	Occupancy percentage
Single room	100	100%
Double rooms	50	80%
Triple rooms	30	60%

The rent of double rooms suite is to be fixed at 2.6 times of the single room suite and that of triple rooms suite as twice of the double rooms suite.

The other expenses for the year 2006 are as follows:

	Rs.
Staff salaries	14,25,000
Room attendante' wages	4,50,000
Lighting, heating and power	2,15,000
Repairs and renevation	1,23,500
Laundy charges	80,500
Interior decoration	74,000

Sandries	1,58,000

Provide profit @ 20% on total taking and assume 360 days in a year.

You are required to calculate the rent to be charged for each type of suite.

(b) 'Under the Rowan Premium Bonus system, a less efficient worker can obtain same bonus as a highly efficient worker.' Discuss with suitable examples. 4

5. (a) ABC Ltd. has furnished the following information from the financial books for the year ended 31st March, 2007: 5+5

Profit & Loss Account

	Rs.		Rs.
To Opening stock (500 units at Rs. 140 each)	70,000	By Sales (10,250 units)	28,70,000
Materials consumed	10,40,000	By Closing stock (250 units at Rs. 200 each)	50,000
Wages	6,00,000		
Gross profit c/d	12,10,000		
	29,20,000		29,20,000
To Factory overheads	3,79,000	By Gross profit b/d	12,10,000
Administration overheads	4,24,000	Interest	1,000
Selling expenses	2,20,000	Rent received	40,000
Bad debts	16,000		
Preliminary expenses	20,000		
Net Profit	1,92,000		
	12,51,000		12,51,000

The cost sheet shows the cost of materials at Rs. 104 per unit and the labour cost at Rs. 80 per unit. The factory overheads are absorbed at 60% of labour cost and administration overheads at 20% of factory cost. Selling expenses are charged at Rs. 24 per unit. The opening stock of finished goods is valued at Rs. 180 per unit.

You are required to prepare:

(i) A statement showing profit as per Cost accounts for the year ended 31st March, 2007; and

(ii) A statement showing the reconciliation of profit as disclosed in Cost accounts with the profit shown in Financial accounts.

(b) Explain any two of the following: 2x2=4

(i) National profit in Contract costing.

(ii) Retention money in Contract costing.

(iii) Economic Batch Quantity in Batch Costing.

6. (a) The following accounting information and financial ratios of PQR Ltd. relate to the year ended 31st December, 2006: 12

2006

I	Accounting Information	
	Gross Profit	15% of sales
	Net profit	8% of sales
	Raw materials consumed	20% of works cost
	Direct wages	10% of works cost
	Stock of raw materials	3 months' usage
	Stock of finished goods	6% of works cost
	Debt collection period	60 days
	All sales are on credit	
II	Financial Rations:	
	Fixed assets to sales	1 : 3
	Fixed assets to Current assets	13 : 11
	Current ratio	2 : 1
	Long–term loans to current liabilities	2 : 1
	Capital to Reserves and Surplus	1 : 4

If value of fixed assets as on 31st December, 2005 amounted to Rs. 26 lakhs, prepare a summarised Profit and Loss account of the company for the year ended 31st December, 2006 and also the Balance Sheet as on 31st December, 2006.

(b) What is Debt securitisation? State the basic debt securitisation process. 4

7. (a) 8

JKL Ltd. is considering the revision of its credit policy with a view to increasing its sales and profit. Currently all its sales are on credit and the customers are given one month's time to settle the dues. It has a contribution of 40% on sales and it can raise additional funds at a cost of 20% per annum. The marketing manager of the company has given the following options along with estimates for considerations:

Particulars	Current Position	I Option	II Option	III Option
Sales in (Rs. lakhs)	200	210	220	250
Credit period (in months)	1	1½	2	3
Bad debts (1% of sales)	2	2½	3	5
Cost of Credit administration (Rs. lakhs)	1,20	1,30	1,50	3,00

You are required to advise the company for the best option.

(b) What do you mean by factoring? Describe the benefits of factoring. 4

8. (a) You are required to determine the weighted average cost of capital of a firm using (i) book–value weights and (ii) market value weights. The following information is available for your perusal: 9

Present book value of the firm's capital structure is:

	Rs.
Debentures of Rs. 100 each	8,00,000
Preference shares of Rs. 100 each	2,00,000
Equity shares of Rs. 10 each	10,00,000
	20,00,000

All these securities are traded in the capital markets. Recent prices are: Debentures @ Rs. 110, Preference shares @ Rs. 120 and Equity shares @ Rs. 22.

Anticipated external financing opportunities are as follows:

(i) Rs. 100 per debenture redeemable at par : 20 years maturity 8% coupon rate, 4% floatation costs, sale price Rs. 100.

(ii) Rs. 100 preference share redeemable at par : 15 years maturity, 10% dividend rate, 5% floatation costs, sale price Rs. 100.

(iii) Equity shares : Rs. 2 per share floatation costs, sale price Rs. 22.

In addition, the dividend expected on the equity share at the end of the year is Rs. 2 per share; the anticipated growth rate in dividends is 5% and the firm has the practice of paying all its earnings in the form of dividend. The corporate tax rate is 50%.

(b) Explain briefly the propositions made in Modigliani and Miller approach on cost of capital. 3

9. (a) A company is considering the proposal of taking up a new project which requires an investment of Rs. 400 lakh on machinery and other assets. The project is expected to yield the following earnings (before depreciation and taxes) over the next five years: 8

Year	Earnings (in Rs. lakh)
1	160
2	160
3	180
4	180
5	150

The cost of raising the additional capital is 12% and assets have to be depreciated at 20% on 'Written Down Value' basis. The scrap value at the end of the five years's period may be taken as zero. Income–tax applicable to the company is 50%.

You are required to calculate the net present value of the project and advise the management to the appropriate decision. Also calcuate the Internal Rate of Return of the Project.

Note: Present value of Re. 1 at different rates of interest are as follows:

Year	10%	12%	14%	16%
1	0.91	0.89	0.88	0.86
2	0.83	0.80	0.77	0.74
3	0.75	0.71	0.67	0.64
4	0.68	0.64	0.59	0.55
5	0.62	0.57	0.52	0.48

(b) State the differences between Global Depository Receipts and Americal Depository Receipts. 4