COST ACCOUNTING & FM

Answers to questions are to be given only in English except in the case of candidate who have opted for Hindi medium. If a candidate who has not opted for Hindi medium, answers in Hindi, his answers in Hindi will not be valued.

All questions are compulsory.
Working notes should form part of the answer.

Marks

1. Answer any five of the following: 5X2=10

(i) What are the main objectives of cost accounting?

(ii) Discuss the treatment of over time premium in cost accounting.

(iii) Explain controllable and non-controllable cost with examples.

(iv) What are the main advantages of cost plus contract?

(v) Discuss the difference between allocation and apportionment of overhead.

(vi) Standard output in 10 hours is 240 units; actual output in 10 hours is 264 units. Wages rate is Rs. 10 per hour. Calculate the amount of bonus and total wages under Emerson Plan.

2. TQM Ltd. has furnished the following information for the month ending 30th June, 2007: 5+10=15

	Master Budget	Actual	Variance
Units produced and sold	80,000	72,000	
Sales (Rs.)	3,20,000	2,80,000	40,000(A)
Direct material (Rs.)	80,000	73,600	6,400 (F)
Direct wages (Rs.)	1,20,000	1,04,800	15,200 (F)
Variable overheads (Rs.)	40,000	37,600	2,400 (F)
Fixed overhead (Rs.)	40,000	39,200	800 (F)
Total Cost	2,80,000	2,55,200	

The Standard costs of the products are as follows:

	Per unit (Rs.)
Direct materials (1 kg. at the rate of Re. 1 per kg.)	1.00
Direct wages (1 hour at the rate of Rs. 1.50)	1.50
Variable overheads (1 hour at the rate of Re. 50)	.50
Actual results for the month showed that 78,400 kg. of material were used and 70,400 labour hours were recorded.	

Required:

(i) Prepare Flexible budget for the month and compare with actual results.

(ii) Calculate material, labour, sales price, variable overhead and fixed overhead expenditure variances and sales volume (profit) variance.

3. (a) JK Ltd. produces a product "AZE", which passes through two processes, viz, process I and process IL The output of each process is treated as the raw material of the next process to which it is transferred and output of the second process is transferred to finished stock. The following data related to December, 2007:

	Process I	**Process II**
25,000 units introduced at a cost of	Rs. 2,00,000	-
Material consumed	Rs. 1,92,000	96,020
Direct labour	Rs. 2,24,000	1,28,000
Manufacturing expenses	Rs. 1,40,000	60,000
Normal wastage of input	10%	10%
Scrap value of normal wastage	Rs. 9.90	8.60
Output in Units	22,000	20,000

Required:

(i) Prepare Process I and Process II account.

(ii) Prepare Abnormal effective/wastage account as the case may be each process.

2+1+2+3=8

(b) ZED Company supplies plastic crockery to fast food restaurants in metropolitan city. One of its products is a special bowl, disposable after initial use, for serving soups to its customers. Bowls are sold in pack 10 pieces at a price of Rs. 50 per pack.

The demand for plastic bowl has been forecasted at a fairly steady rate of 40,000 packs every year. The company purchases the bowl direct from manufacturer at Rs. 40 per pack within a three days lead time. The ordering and related cost is Rs. 8 per order. The storage cost is 10% per cent per annum of average inventory investment.

Required:

(i) Calculate Economic Order Quantity.

(ii) Calculate number of orders needed every year.

(iii) Calculate the total cost of ordering and storage bowls for the year.

(iv) Determine when should the next order to be placed. (Assuming that the company does maintain a safety stock and that the present inventory level is 333 packs with a year of 360 working days.

4. Answer any **three** of the following:

(i) Explain and illustrate cash break even chart.

(ii) Discuss ABC analysis as a technique of inventory control.

(iii) Distinguish between Job evaluation and Merit rating.

(iv) A company has fixed cost of Rs. 90,000, Sales Rs. 3,00,000 and Profit Rs. 60,000.

Required:

(i) Sales volume if in the next period, the company suffered a loss of Rs. 30,000.

(ii) What is the margin of safety for a profit of Rs. 90,000?

5. Answer any **five** of the following : 5X2=10

(i) Explain the relevance of time value of money in financial decisions.

(ii) Discuss the features of Secured Premium Notes (SPNs).

(iii) The following data relate to RT Ltd:

	Rs.
Earning before interest and tax (EBIT)	10,00,000
Fixed cost	20,00,000
Earning Before Tax	8,00,000

Required: Calculate combined leverage

(iv) Explain the concept of closed and open ended lease.

(v) Discuss the advantages of preference share capital as an instrument of raising funds.

(vi) Explain the principles of "Trading on equity".

6. The financial statement and operating results of PQR revealed the following position as on 31st Ma

8+7=15

Equity share capital (Rs. 10 fully paid share)	Rs. 20,00,000
Working capital	Rs. 6,00,000
Bank overdraft	Rs. 1,00,000
Current ratio	2.5:1
Liquidity ratio	1.5:1
Proprietary ratio (Net fixed assets/Proprietary fund)	.75:1
Cost of sales	Rs. 14,40,000
Debtors velocity	2 months
Stock turnover based on cost of sales	4 times
Gross profit ratio	20% of sales
Net profit ratio	15% of sales

Closing stock was 25% higher than the opening stock. There were also free reserves brought forward from earlier years. Current assets include stock, debtors and cash only. The current liabilities expect bank overdraft treated as creditors.

Expenses include depreciation of Rs. 90,000.

The following information was collected from the records for the year ended 31st March, 2007

— Total sales for the year were 20% higher as compared to previous year.

— Balances as on 31st March, 2007 were Stock Rs. 5,20,000, Creditors Rs. 4,15,000, Debtors Rs. 4,95,000 and Cash balance Rs. 3,10,000.

— Percentage of Gross profit on turnover has gone up from 20% to 25% and ratio of net profit to sales from 15% to 16%.

— A portions of Fixed assets was very old (book values Rs. 1,80,000) disposed for Rs. 90,000. (No depreciations to be provided on this item).

— Long-term investments were purchased for Rs. 2,96,600.

— Bank overdraft fully discharged.

— Percentage of depreciation to Fixed assets to be provided at the rate in the previous year.

Required:

(i) Prepare Balance Sheet as on 31st March, 2006 and 31st March, 2007.

(ii) Prepare the fund flow statement for the year ended 31st March, 2007.

2+3+3=8

7. (a) ABC Ltd. wishes to raise additional finance of Rs. 20 lakhs for meeting its investment plans. The company has Rs. 4,00,000 in the form of retained earnings available for investment purposes. The following are the further details:

- Debt equity ratio 25:75.
- Cost of debt at the rate of 10 per cent (before tax) upto Rs. 2,00,000 and 13% (before tax) beyond that.
- Earning per share, Rs. 12.
- Dividend payout 50% of earnings.

- Expected growth rate in dividend 10%.
- Current market price per share, Rs. 60.
- Company's tax rate is 30% and shareholder's personal tax rate is 20%.

Required:

(i) Calculate the post tax average cost of additional debt.

(ii) Calculate the cost of retained earnings and cost of equity.

(iii) Calculate the overall weighted average (after tax) cost of additional finance.

2+3+3=8

(b) C Ltd. is considering investing in a project. The expected original investment in the project will be Rs. 2,00,000, the life of project will be 5 year with no salvage value. The expected net cash inflows after depreciation but before tax during the life of the project will be as following:

Year	1	2	3	4	5
Rs.	85,000	1,00,000	80,000	80,000	40,000

The project will be depreciated at the rate of 20% on original cost. The company is subjected to 30% tax rate.

Required:

(i) Calculate pay back period and average rate of return (ARR)

(ii) Calculate net present value and net present value index, if cost of capital is 10%.

(iii) Calculate internal rate of return

Note : The P.V. factors are:

Year	P.V at 10%	P.V at 37%	P.V at 38%	P.V at 40%
1	.909	.730	.725	.714
2	.826	.533	.525	.510
3	.751	.389	.381	.364
4	.683	.284	.276	.260
5	.621	.207	.200	.186

8. Answer any **three** of the following: 3x3=9

(i) Explain the concept of Debt securitization.

(ii) Explain briefly the functions of Treasury Department.

(iii) Explain briefly the features of External Commercial. Borrowings. (ECB)

(iv) The Sales Manager of AB Limited suggests that if credit period is given for 1.5 months then sales may likely to increase by Rs. 1,20,000 per annum. Cost of sales amounted to 90% of sales. The risk of non-payment is 5%. Income tax rate is 30%. The expected return on investment is Rs. 3,375 (after tax). Should the company accept the suggestion of Sales Manager?