Max Time 3 Hrs. Max Marks 100

COST ACCOUNTING & FINANCIAL MANAGEMENT

Question 1 is compulsory Answer 5 from remaining 6

Q.1 (i) XP Ltd. furnishes you the following relating to process II.

i) Opening work-in-progress Nil

ii) Units introduced 45,000 units @ `15

iii) Expenses debited to the process:

	`
Direct material	61,530
Labour	88,820
Overheads	1,76,400

iv) Normal loss in the process = 2% of input

v) Closing work-in-progress- 1200 units

Degree of completion-	Materials	100%
	Labour	50%
	Overhead	40%

vi) Finished output- 39,500 units

vii) Degree of completion of abnormal loss:

Material	100%
Labour	80%
Overhead	60%

viii) Units scraped as normal loss were sold at `4.50 per unit.

ix) All the units of abnormal loss were sold at `9 per unit.

Prepare:

a) Statement of equivalent production.

b) Statement showing the cost of finished goods, abnormal loss and closing work-in-progress.

c) Process II account and abnormal loss account. [8]

(ii) Following information are available for the year 2008 and 2009 of PIX Limited:

Year	**2008**	**2009**
Sales	`30,00,000	`55,00,000
Profit / (Loss)	(`3,00,000)	`7,50,000

In 2009 Fixed cost reduced by 25%.

Calculate – (a) P/V Ratio, (b) Total fixed cost, and

(c) Sales required to earn Profit of `12,00,000 in 2010 if selling price will increase by 10%. [8]

Q.2 (i) Discuss the treatment of overtime premium in cost Accounting [4]

(ii) The following is the trial balance of SSP Construction Company, engaged on the execution of Contract No. 7, for the year ended 31st December, 2011:

Contractee's Account – amount received		`3,00,000
Buildings	`1,60,000	
Creditors		72,000
Bank Balance	33,000	
Capital Account		5,00,000
Materials	2,00,000	
Wages	1,80,000	
Expenses	49,000	

Plant	2,50,000	
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	8,72,000	8,72,000

The work on Contract No. 7 was commenced on 1st January 2011. Materials costing `1,60,000 were sent to the site of the contract but those of `8,000 were sold for `7,000. Wages of `1,70,000 were specifically for the above contract. Plant costing `50,000 was used on the contract all through the year. Plant with a cost of `2 lakhs was used from 1st January to 30th September and was then returned to the stores. Materials of the cost of `4,000 were at site on 31st December,1999.

The contract was of `6,00,000. Work certified was 70% of the total contract work at the end of 2011. Uncertified work was estimated at `15,000 on 31st December, 2011.

Expenses are charged to the contract at 25% of Wages. Plant & Building is to be depreciated at 10% for the entire year. Wages of `5,000 is outstanding.

Prepare Contract No. 7 Account for the year 2011 and make out the Balance Sheet as on 31st December 2011 in the books of Premier Construction Co. [12]

Q.3 (i) A skilled worker in XYZ Ltd. is paid a guaranteed wage rate of `30 per hour. The standard time per unit for a particular product is 5 hours, X, a machine man, has been paid wages under the Rowan Incentive Plan and he had earned an effective hourly rate of ` 40 on the manufacture of that particular product.

What could have been his total earnings and effective hourly rate, had he been put on Halsey Incentive Scheme (50%)? [5]

(ii) A manufacturer of glass bottles has been affected by competition from plastic bottles and is currently operating at between 65 and 70 % of maximum capacity. From the accounting records the following figures were extracted:

Standard cost per gross (A gross is 144 bottles and is the cost unit used within the business):

Direct materials	` 8.00
Direct Labour	7.00
Variable production overhead	3.50
Total variable production cost	18.50
Fixed production overhead	7.52*
Total production standard cost	26.02

*The fixed production overhead rate was based on the following computations:

Total annual fixed production overhead was budgeted at `75,84,000 or `6,32,000 per month. Production volume was set at 10,08,000 gross bottles or 70 per cent of maximum capacity.

In October material cost, D. Labour & Var. Overheads increased by 10%,15% & 20% resp.

There is a slight difference in budgeted fixed production overhead at different levels operating:

Activity level	Amount per month
Per cent of maximum capacity	**` '000**
50 – 64	632
65 – 90	650
91 – 100	666

You may assume that actual fixed production overhead incurred was 20% above budgeted. Additional information:

	September	October
Gross sold	87,000	101,000
Gross produced	1,15,000	78,000
Sales price, per gross	` 32	` 35
Fixed selling costs	1,20,000	1,50,000
Fixed administrative costs	80,000	1,00,000

There were no finished goods in stock at 1 September.
You are required to prepare monthly profit statement for September and October using: (i) absorption costing ; and (ii) marginal costing. [11]

Q.4 From the following figures prepare a reconciliation statement:

Net Profit as per costing records	`1,75,000
Works overhead under recovered in costing	6,720
Administrative overhead recovered in excess	3,700
Depreciation charged in financial records	14,200
Depreciation recovered in costing	12,500
Interest on loan not included in costing	8,000
Obsolescence charged (loss) in financial records	5,700
Income- tax provided in financial books	40,300
Bank Interest credited in financial books	750
Stores adjustment (credit) in financial books	475
Value of opening stock in : cost accounts	52,600
Financial accounts	54,000
Value of closing stock in: cost accounts	52,000
Financial accounts	49,600
Interest charged in cost accounts but not in financial accounts	6,000
Preliminary expenses written off in financial accounts	800
Provision for doubtful debts in financial accounts	150

[4]

(ii) ***Discuss*** ABC analysis as a system of Inventory control. [4]

(iii) The Company has decided to acquire a new machine. One alternative is to lease the truck on a 4 year contract for a lease payment of $12,500 per year, with payments to be made at the beginning of each year. The lease would include maintenance. Alternatively, Olson could purchase the machine outright for $50,000, financing with a bank loan for the net purchase price and amortizing the loan over a 4 year period in 4:3:2:1 at an interest rate of 15% per year under the borrow–to purchase arrangement. The Company would have to maintain the truck at a cost of $3,000 per year payable at year – end.
Assume depreciation on machine 1st year – 30%, 2nd year – 45%, 3rd year – 15% and 4th year – 10% on total cost and it has a salvage value of $10,000 which is the expected market value after 4 years, at which time the co. plans to replace the machine irrespective of whether it leases or buys. The Co. has a tax rate of 35%. ***Advise*** the management. [8]

Q.5 (i) The balance sheets of SSP Ltd. on 31/3/11 and 31/3/12

	31/3/11	31/3/12		31/3/11	31/3/12
Equity share Cap.	15,00,000	23,00,000	**F. Assets**		
12% pref. sh. Cap.	5,00,000	3,00,000	Cost	25,00,000	38,00,000
R & S			(-) Prov. for dep.	7,40,000	8,90,000
P & L a/c	2,50,000	4,10,000	Net Block	17,60,000	29,10,000
Sec. premium	1,50,000	1,66,000	Investment	5,30,000	6,70,000
General Reserve	1,80,000	2,50,000	**C. Assets**		
10 % Debentures	5,00,000	8,00,000	Stock	3,50,000	4,00,000
Creditors	1,70,000	3,04,000	Debtors	4,80,000	4,10,000
Prop Dividend	1,00,000	1,40,000	Cash & Bank	2,30,000	2,80,000

	33,50,000	46,70,000		33,50,000	46,70,000

i) Pref. shares redeemed on 31/3/10 at 15% premium.

ii) `5,00,000 eq. shares issued to brothers against acquisition of fixed assets of `2,50,000, stock `2,20,000 and creditors of `40,000.

iii) Balance Eq. shares issued at premium of 12%.

iv) Investment of `80,000 w/o through General Reserve.

v) Machine costing of `3,00,000 with book value of `1,70,000 sold for `1,30,000.

vi) Dividend of `80,000 declared for 10 - 11 and discharged simultaneously with CDT @16%.

vii) Income Tax paid during the year of `1,20,000.

Prepare Funds Flow Statement [10]

(ii) From the following, ***prepare*** Income Statements of A and B. Briefly comment an each firm's performance:

	Firm A	Firm B
Total Leverage	3 : 1	4 : 1
Interest	`600	` 800
Operating Leverage	2 : 1	3 : 1
Variable cost as a % of sales	66. 67%	75%
Income – tax Rate	40%	40%

[6]

Q.6 (i) What is Factoring & Discuss the main advantages of Factoring? [4]

(ii) Explain the following Ratios

(a) Operating Ratio

(b) P/E Ratio

(c) Fixed Interest & Dividend Coverage Ratio [3x3]

(iii) Distinguish between Cost reduction & cost Control [3]

Q.7 (i) From the following particulars relating to AB Co., ***prepare*** a Balance Sheet as on 31-12-2003:

Fixed Assets/Turnover Ratio	1:2
Debt Collection Period	Two months
Gross Profit	25%
Consumption of Raw Materials	40% of cost.
Stock of Raw Materials	3 month's consumption
Finished goods	20% of turnover at cost
Fixed Assets to Current Assets	1 : 1
Current Ratio	2
Long-Term Loan to Current Liability	1 : 3
Capital to Reserve	5 : 2
Value of Fixed Assets	`15,00,000

Show workings. [10]

(ii) RBI, in its issue of Flexi bonds II offered Growing Interest Bond. The interest will be paid to the investors every year at the rates given below and the minimum deposit is 25,000.

	Interest (p.a.)
Year 1	11.50%
Year 2	12.50%
Year 3	13.50%
Year 4	15.50%
Year 5	17.00%

Calculate the Annual effective rate of return. [6]