



Answer All Questions

Calculator Permitted

Time: Three (03) hours

1. XY plc company invited applications for issuing 50000 equity shares of Rs 10 each. The amount payable follows:

On application	-	Rs.3 per share
On allotment	-	Rs.4 per share
On first call and final call	-	Rs.3 per share

Applications were received for 75000 shares and pro-rata allotment was made as follows:

Applicants 40000 shares were allotted 30000 shares on pro-rata basis.

Applicants for 35000 shares were allotted 20000 shares on pro-rata basis.

Ranjit, to whom 1200 shares were allotted out of the group applying for 40000 shares, failed to pay the allotment money. His shares were forfeited immediately after allotment. Shihan, who had applied for 700 shares out of the group applying for 35000 shares failed to pay the first and final calls. His shares were also forfeited. Out of the forfeited shares, 1000 shares were re-issued @ Rs.8 per share fully paid up. The re-issued shares included all the forfeited shares of Shihan.

Required:

Write journal entries to record the above transactions.

(10 Marks)

02. (I) The following relevant information and balances are extracted from the books of SPD plc for year ended 31st December 2010.

(a) The profit earned for the year Rs.250000 after considering the following items:

	Rs.
Depreciation	10000
Amortization of Goodwill	5000
Transfer to General Reserve	7000
Profit on Disposal of Land	3000

(b) Balances as on

Items	31.12.2010	01.01.2011
Debtors	15000	12000
Stock	20000	15000
Prepaid Expenses	4000	6000
Bills Receivable	8000	10000
Creditors	10000	13000
Bills Payable	7000	8000

(c) Tax paid for the year amounted to Rs 25000 and interest paid Rs.10000.

Required:

Calculate cash flow generated by operations for year

(05 M. (1))

(II) The Balance Sheets of CFS plc as at 31st December, 2009 and 2010 are given below:

Liabilities	2009	2010	Assets	2009	2010
Share Capital	400000	500000	Fixed Assets	730000	900000
Profit & Loss A/C	325000	500000	Investment	60000	100000
10% Long term Loans	200000	150000	Stock	140000	130000
Creditors	75000	90000	Debtors	60000	80000
Tax Payable	55000	70000	Bills Receivable	20000	20000
Dividend Payable	45000	40000	Cash	90000	110000
	1100000	1350000		1100000	1350000

The Income Statement of DFC plc for the year ended 31st December, 2010 is as follows:

	Rs.	Rs.
Sales		150000
Less: Cost sales		90000
Gross profit		60000
Less: Operating Expenses:		
Administration (Include Depreciation of Rs.30000)	130000	
Finance	20000	
Selling & Distribution	150000	300000
Operating profit		30000
Add: Investment Income		10000
Profit Before Tax		310000
Less: Taxation		100000
Profit After Tax		210000

Statement of Retained Earnings

	Rs.
Opening Balance	325000
Add: Profit After Tax	215000
	540000
Less: Dividend	40000
Closing Balance	500000



Required:

Prepare the Cash Flow Statement of CFS plc for the year ended 31.12.2010, reporting cash flow from operating activities in the direct method.

(20 Marks)

(Total 25 Marks)

3. (I) Minimax bakery has been approached by a customer who would need 100 kg of cake, and who is willing to pay Rs.35,000 for it. The job would require the following materials:

<i>Material</i>	<i>Total units required</i>	<i>Units already in stock</i>	<i>Book value of units in stock Rs./unit</i>	<i>Realizable value Rs./unit</i>	<i>Replacement cost Rs./unit</i>
Egg	1,000	0	-	-	15
Wheat flour	30	100	70	75	77
Sugar	30	20	90	95	110
Margarine	30	30	400	425	500
Plums	7	35	200	100	220
Vanilla	20	25	120	0	130

- (a) Wheat flour is used regularly by Minimax bakery and if units of Wheat flour are required for this job, they would need to be replaced to meet other production demand.
- (b) Margarine and plums are in stock as the result of previous over buying, and they have a restricted use. No other use could be found for plums, but margarine could be used in another job as substitute for 20 units butter, which currently cost of Rs.650 per unit (of which the company has no units in stock at the moment).
- (c) Vanilla has no other use and is in the stock as a result of previous over buying.

(d) The bakery employs 10 workers who are in permanent grade. The bakery pays Rs.12,000 as a monthly salary to an employee. Two employees will be idle in a week. The job would require 16 labour hours.

Required:

Prepare a statement of relevant cost for this job and advise the manager on whether the job could be accepted.

(15 M)

(II) A company has three operational departments (weaving, processing and packing) with capacity to produce three different types of clothes namely Suiting, Shirting and Woollen yielding the profit Rs.2, Rs.4 and Rs.3 per meter respectively. One-meter suiting requires 1 minute in weaving, 2 minutes in processing and 1 minute in packing. Similarly one meter shirting requires 4 minutes of weaving, 1 minute in processing and 3 minutes in packing. One meter woollen requires 3 minutes in each department. In a week, total run time of each department is 60, 40 and 80 hours for weaving, processing and packing departments respectively.

Required:

Formulate the linear programming problem to find the product mix to maximize the profit (equations only).

(10 M)

(III) Micro plc manufactures dress. It produces three varieties of dresses, which are immensely popular because they are designed in a very innovative style. Information on future demands as well as labour hours is given in the table below.

	Type 1	Type 2	Type 3
Contribution	Rs.80	Rs.60	Rs.100
Labour hours required per unit	2	3	4
Estimated sales demand (units)	650	800	900

This year company faces the problem of restricted labour hours. There are 4,000 labour hours available.

Required:

Calculate optimum production plan for the company in order to maximize the profits.

(05 M)

(Total 30 M)

(I) Pro Ltd has received an offer of quantity discounts on its order of materials as under:

Price Per Ton	Tonnes
24.00	Less than 1000
23.60	1000 and less than 2000
23.20	2000 and less than 3000
22.80	3000 and above



The annual requirement for the material is 3600 tonnes. The ordering cost per order is Rs.900 and further for inspection cost Rs.100 incurred per order. The stock-holding cost is estimated at 20% of material cost per annum.

Required:

Find the Optimum Order Quantity which minimizes the inventory cost

(10 marks)

(II) Ram Ltd. employs its workers for a single shift of 8 hours for 25 days in a month. The company has recently fixed the standard output for a mass production item and introduced an incentive scheme to boost output. Details of wages payable to the workers are as follows:

- Basic wages/ piece wages @ Rs.2 per unit subject to a guaranteed minimum wage of Rs.100 per day.
- Dearness allowance at Rs.50 per day.
- Bonus incentive:

Standard output per day per worker : 100 units

Incentive bonus upto 80% efficiency : Nil

Incentive bonus for efficiency above 80% : Rs.120 for every 1% increase above 80%.

The details of performance of four workers for the month of April are as follows.

Worker	No. of days worked	Output (units)
A	25	2100
B	18	820
C	25	1920
D	23	1909

Required:

Calculate the total earnings of each worker.

(10 Marks)

(III) A company has three production departments A, B and C two service departments X and Y. The following data are extracted from the records of the company for a particular period:

Rent and rates	Rs.25000
General lighting	Rs.3000
Indirect wages	Rs.30000
Power	Rs.7500
Depreciation on machinery	Rs.60000
Sundries	Rs.50000

Further information given on department wise:

Particulars	Total	Departments				
		A	B	C	X	Y
Direct wages (Rs.)	50000	15000	10000	15000	7500	22500
H.P of machines used	150	60	30	50	10	10
Cost of machinery (Rs.)	1500000	300000	400000	500000	50000	250000
Production hours worked	-	5720	4520	9256	-	-
Floor space used (sq.m)	10000	2000	2500	3000	2000	2500
Lighting points (No)	60	10	15	20	10	5

Service department's expenses allocation:

	Departments				
	A	B	C	X	Y
X	20%	30%	40%	-	10%
Y	30%	20%	30%	20%	-

Required:

- Compute overhead absorption rate of production department using simultaneous equation method.
- Determine the total cost of a product whose direct material cost and direct labor are Rs.250 and Rs.150 respectively and which would consume 4 hours, 5 hours and 6 hours in department A, B and C respectively.