## Second Year / First Semester Examination in Business Administration/hagnind et

 2008/2009 (April / May 2010) (Proper)DAF 20\%3 Advanced Accounting

## Answer All Questions

Calculator Permitted
Time: Three (03) hours

1. AMC plc company issued a prospectus inviting applications for 20000 shares of Rs 10 each payable follows:

| On application | -Rs .2 |
| :--- | ---: |
| On allotment | -Rs .3 |
| On first call | -Rs .3 |
| On second and final call -Rs .2 |  |

Applications were received for 30000 shares and pro-rata allotment was made on the applications for 24000 shares. Money overpaid on applications was employed on account of sum due on allotment. Ramesh, to whom 400 shares were allotted, failed to pay the allotment money and on his subsequent failure to pay the first call his shares were forfeited. Mohan, the holder of 600 shares, failed to pay the two calls, and his shares were forfeited after the second call. Of the shares forfeited, 800 shares were sold to Krishna credited as fully paid for Rs. 9 per share, the whole of Ramesh's shares being included.

Required:
Write journal entries to record the above transactions.
(10 Marks)
02. The balance sheet of MTK plc as on $31^{\text {st }}$ March, 2009 was as follows:

| Liabilities | Amounts | Assets | Amounts |
| :--- | ---: | :--- | ---: |
| Equity shares of Rs. 50 each fully paid | 450000 | Fixed assets | 690000 |
| Preference shares of Rs.100 each fully paid | 130000 | Investments | 37000 |
| Profit and Loss account | 96000 | Bank Balance | 62000 |
| Creditors | 113000 |  |  |
|  | $\mathbf{7 8 9 0 0 0}$ |  | $\mathbf{7 8 9 0 0 0}$ |

In order to facilitate the redemption of preference shares at a premium of $10 \%$, the company decided
(a) To sell all the investments for Rs. 30000
(b) To finance part of redemption from company funds, subject to, leaving a bank balance Rs. 24000
(c) To issue minimum equity shares of Rs. 50 each at a premium of Rs .10 per share to rais the balance of funds required.

The company also decided to issue 1000 equity shares of Rs. 50 each as bonus to the existin shareholders.

## Required:

Prepare the necessary journal entries to record the above transactions and prepare the balano sheet as on completion of the above transactions.
(10 Marks
03. (I) The following relevant balances are extracted from the books of LPG plc for year ended 31 December 2009.

|  | 31.12.2009 | 01.01.2009 |
| :--- | ---: | ---: |
| Cash | 10000 | 15000 |
| Marketable securities | 8000 | 4000 |
| Debtors | 50000 | 30000 |
| Provision for doubtful debts | 2000 | 1500 |
| Stock | 47000 | 35000 |
| Prepaid Expenses | 4000 | 1000 |
| creditors | 40000 | 55000 |
| Provision for Taxation | 65000 | 40000 |
| Provision for depreciation | 60000 | 50000 |

Operating profit after tax for the year ended $31^{\text {st }}$ of December 2009 before interest received ( $\mathrm{Rs}_{\mathrm{s}}$ 5000) and claim received for disputed land (Rs 10000) was Rs 180000. Tax paid for the yea amounted to Rs 45000 and interest paid Rs. 8000.

## Required:

Calculate cash flow generated by operations for year
(II) The Balance Sheets of DFC plc as at $31{ }^{\text {st }}$ December, 2008 and 2009 are given below:

| Liabilities | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | Assets | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ |
| :--- | ---: | ---: | :--- | ---: | ---: |
| Share Capital | 500000 | 500000 | Fixed assets | 930000 | 1100000 |
| Profit \& Loss A/C | 425000 | 500000 | Stock | 340000 | 350000 |
| Long term loans | 500000 | 530000 | Debtors | 360000 | 330000 |
| Creditors | 175000 | 200000 | Cash | 130000 | 135000 |
| Tax Payable | 95000 | 110000 | Bills Receivable | 20000 | 15000 |
| Dividend Payable | 85000 | 90000 |  |  |  |
|  | $\mathbf{1 7 8 0 0 0 0}$ | $\mathbf{1 9 3 0 0 0 0}$ |  | $\mathbf{1 7 8 0 0 0 0}$ | $\mathbf{1 9 3 0 0 0 0}$ |

The Income Statement of DFC plc for the year ended 31 ${ }^{\text {st }}$ December, 2009 is as follows:

|  | Rs. | Rs. |
| :--- | ---: | ---: |
| Sales |  | 2040000 |
| Less: Cost sales |  | 1360000 |
| Gross profit |  | 680000 |
| Less: Operating Expenses: | 230000 |  |
| Administrative Expenses | 70000 |  |
| Interest | 110000 | 410000 |
| Depreciation |  | 270000 |
| Operating profit |  | 25000 |
| Add: Non operating Income (Dividend Received) |  | 295000 |
| Profit Before Tax |  | 130000 |
| Less: Taxation |  | 165000 |
| Profit After Tax |  |  |

Statement of Retained Earnings

|  | Rs. |
| :--- | ---: |
| Opening Balance | 425000 |
| Add: Profit After Tax | 165000 |
|  | 590000 |
| Less: Dividend | 90000 |
| Closing Balance | 500000 |

## Required:

Prepare the Cash Flow Statement of DFC plc for the year ended 31.12.2009, reporting cash flow from operating activities in the direct method.
(15 Marks)
(Total 20 Marks)
04. (i) DMG plc has been approached by a customer who would like a special job to be done for hin and who is willing to pay Rs. 22,000 for it. The job would require the following materials:

| Material | Total units <br> required | Units <br> already in <br> stock | Book value of <br> units in stock <br> Rs./unit | Realizable <br> value <br> Rs./unit | Replacement <br> cost <br> Rs./unit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | 1,000 | 0 | - | - | 6 |
| B | 1,000 | 600 | 2 | 2.5 | 5 |
| C | 1,000 | 700 | 3 | 2.5 | 4 |
| D | 200 | 200 | 4 | 6.0 | 9 |

(a) Material B is used regularly by DMG plc and if units of $B$ are required for this job, the would need to be replaced to meet other production demand.
(b) Material $C$ and $D$ are in stock as the result of previous over buying, and they have restricted use. No other use could be found for material C , but the units of material could be used in another job as substitute for 300 units material $E$, which currently 0 of Rs. 5 per unit (of which the company has no units in stock at the moment).

## Required:

What are the relevant costs of material, in deciding whether or not to accept the contract?
(10 Marks
(II) Micro Ltd. manufactures and sells three products, $\mathrm{X}, \mathrm{Y}$ and Z , for which budgeted sale demand, unit selling prices and unit variable costs are as follows.

|  | X |  | Y |  | Z |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Budgeted sales demand | 550 units |  | 500 units |  | 400 units |  |
|  | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| Unit sales price |  | 16 |  | 18 |  | 14 |
| Variable costs: materials | 8 |  | 6 |  | 2 |  |
| labour | 4 | 12 | 6 | 12 | 9 | 11 |
| Unit contribution |  | 4 |  | 6 |  | 3 |

The company has existing stocks of 250 units of $X$ and 200 units of $Z$, which it is quite willin to use up to meet sales demand. All three products use the same direct materials and th same type of direct labour. In the next year, the available supply of materials will $b$ restricted to Rs.4,800 (at cost) and the available supply of labour to Rs.6,600 (at cost).

## Required:

Determine the Production Mix and Sales Mix which would maximize the company's profits the next year.
05. (I) MJC plc manufactures two products, known as Alpha and Sigma. Alpha is produced in department 1 and Sigma in department 2. The following information is available for 2010 2011.

Standard material and labour costs:

|  | Rs. |
| :--- | :---: |
| Material X | 7.20 per unit |
| Material B | 16.00 per unit |
| Direct labour | 12.00 per hour |

Overhead is recovered on a direct labour hour basis.
The standard material and labour usage for each product is as follows:

|  | Model Alpha | Model Sigma |
| :--- | :---: | :---: |
| Material X | 10 units | 8 units |
| Material B | 5 units | 9 units |
| Direct labour | 10 hours | 15 hours |

The Balance sheet for the year ended 31 March 2010 was as follows:

|  | Rs. | Rs. | Rs. |
| :--- | :---: | :---: | :---: |
| Fixed assets: |  |  |  |
| Land |  | 170,000 |  |
| Building and equipment | $1,292,000$ |  |  |
| Less: Depreciation | 255,000 | $1,037,000$ | $1,207,000$ |
| Current assets: | 99,076 |  |  |
| Stocks: Finished goods | 189,200 |  |  |
| Raw material | 289,000 |  |  |
| Debtors | 34,000 |  |  |
| Cash | 611,276 |  |  |
|  |  |  |  |
| Less: Current liabilities | 248,800 |  | 362,476 |
| Creditors |  |  | $1,569,476$ |
| Net assets |  |  |  |
| Stated Capital: |  | 1200,000 |  |
| 120,000 Ordinary shares |  | 369,476 |  |
| Reserves |  |  | $1,569,476$ |

Other relevant data is as follows for the year 2010-2011:

|  | Finished product |  |
| :--- | ---: | :---: |
|  | Model alpha | Model sigma |
| Forecast sales (units) | 8,500 | 1,600 |
| Selling price per unit (Rs.) | 400 | 560 |
| Ending inventory required (units) | 1,870 | 90 |
| Beginning inventory (units) | 170 | 85 |


|  | Direct material |  |
| :--- | ---: | ---: |
|  | Material $\mathbf{X}$ | Material $\mathbf{Y}$ |
| Beginning inventory (units) | 8,500 | 8,000 |
| Ending inventory required (units) | 10,200 | 1,700 |

## Required:

Prepare the following budgets:
(a) Sales budget
(b) Production budget
(c) Direct materials usage budget
(d) Direct materials purchase budget
(e) Direct labour budget
(II) The annual demand for an item of inventory is 24000 units. Whose price is Rs 10 per unit, ordering cost per order is Rs. 350 and inventory holding cost are $24 \%$ per annum.
Required:
(a) Find best order quantity which minimizes inventory cost, number of orders to be place in a year and inventory cycle time.
(b) Suppose the supplier offers a discount of $7.5 \%$ on selling price if the quantity ordere is 400 units or more. The rate of discount will increase to $12.5 \%$ if the order is for 300 units or more. As a cost accountant suggest management regarding minimizin inventory cost.
(III) During the month of April 2009, two worker of A and B produced 2100 units and 2880 units respectively. The standard production per month per worker is 3200 units. The piece rate is paid at Rs. 5.00 per unit. In addition production bonus is Rs. 25 paid for each percentage of actual production exceeding $70 \%$ over standard production. Further monthly dearness payment of fixed Rs. 7000 was paid to each worker.

## Required:

Calculate the payment for each worker for the month.
(05 marks)
(IV) Harri Industry has two production departments and two service departments. The actual expenses of the factory for the month of January 2010 are as follows.

|  | Rs. |
| :--- | :--- |
| Rent | 8000 |
| Lighting | 4000 |
| Depreciation of Machinery | 5000 |

The following expenses and further details are given as follows.

| Expenses and Details | Total | Production <br> Departments |  | Service <br> Departments |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  |  | $\mathbf{L}$ | $\mathbf{M}$ | $\mathbf{X}$ | $\mathbf{Y}$ |
| Direct Material and Labour cost (Rs.) | 17604 | 4200 | 6400 | 3500 | 3504 |
| Indirect Material and Labour Cost (Rs.) | 8500 | 2100 | 4000 | 1100 | 1300 |
| Area (Sq.ft) | 2500 | 600 | 1200 | 500 | 200 |
| Light points | 80 | 16 | 40 | 14 | 10 |
| Value of machinery (Rs.) | 50000 | 25000 | 16000 | 5000 | 4000 |
| Working Hours | 2945 | 1000 | 1945 | - | - |

Expenses of service departments $X$ and $Y$ are appointed as follows.

| Service Departments | L | M | $\mathbf{X}$ | $\mathbf{Y}$ |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{X}$ | $40 \%$ | $40 \%$ | - | $20 \%$ |
| $\mathbf{Y}$ | $50 \%$ | $30 \%$ | $20 \%$ | - |

## Required:

(I) Calculate the Overhead Absorption Rate per working hours in respect of two production departments.
(II) And what will be cost of an item with a direct material cost of Rs. 100 and direct labour cost of Rs. 50 which consumes 02 working hours form each production department.

