Roll No. ............................

Total No. of Questions – **7**

Total No. of Printed Pages – **8**

Time Allowed – **3** Hours

Maximum Marks – **100**

# FSM

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

Question No. **1** is compulsory.

Attempt any **five** questions from the remaining **six** questions.

"Working notes should form part of the answer."

**Marks**

1. Answer the following : **4×5 =20**

(a) X Limited has estimated that for a new product its break-even point is 20,000 units if the item is sold for ₹ 14 per unit and variable cost ₹ 9 per unit. Calculate the degree of operating leverage for sales volume 25,000 units and 30,000 units.

(b) Accountant of your company had computed labour turnover rates for the quarter ended $30^{th}$ September, 2012 as 14%, 8% and 6% under Flux method, Replacement method and Separation method respectively. If the number of workers replaced during $2^{nd}$ quarter of the financial year 2012-13 is 36, find the following :

(i) The number of workers recruited and joined; and

(ii) The number of workers left and discharged.

(c) X is invested ₹ 2,40,000 at annual rate of interest of 10 percent. What is the amount after 3 years if the compounding is done ?

(i) Annually

(ii) Semi-annually.

Marks

(d) KL Limited produces product 'M' which has a quarterly demand of 8,000 units. The product requires 3 kgs quantity of material 'X' for every finished unit of product. The other information are follows :

| | | |
|---|---|---|
| Cost of material 'X' | : | ₹ 20 per kg. |
| Cost of placing an order | : | ₹ 1000 per order |
| Carrying Cost | : | 15% per annum of average inventory |

You are required :

(i) Calculate the Economic Order Quantity for material 'X'.

(ii) Should the company accept an offer of 2 percent discount by the supplier, if he wants to supply the annual requirement of material 'X' in 4 equal quarterly instalments ?

2. (a) The following account balances and distribution of indirect charges are taken from the accounts of a manufacturing concern for the year ending on 31st March, 2012 : 8

| Item | Total Amount (₹) | Production Departments | | | Service Departments | |
|---|---|---|---|---|---|---|
| | | X (₹) | Y (₹) | Z (₹) | A (₹) | B (₹) |
| Indirect Material | 1,25,000 | 20,000 | 30,000 | 45,000 | 25,000 | 5,000 |
| Indirect Labour | 2,60,000 | 45,000 | 50,000 | 70,000 | 60,000 | 35,000 |
| Superintendent's Salary | 96,000 | – | – | 96,000 | – | – |
| Fuel & Heat | 15,000 | | | | | |
| Power | 1,80,000 | | | | | |
| Rent & Rates | 1,50,000 | | | | | |
| Insurance | 18,000 | | | | | |
| Meal Charges | 60,000 | | | | | |
| Depreciation | 2,70,000 | | | | | |

The following departmental data are also available :

| | Production Departments | | | Service Departments | |
|---|---|---|---|---|---|
| | X | Y | Z | A | B |
| Area (Sq. ft.) | 4,400 | 4,000 | 3,000 | 2,400 | 1,200 |
| Capital Value of Assets (₹) | 4,00,000 | 6,00,000 | 5,00,000 | 1,00,000 | 2,00,000 |
| Kilowatt Hours | 3,500 | 4,000 | 3,000 | 1,500 | – |
| Radiator Sections | 20 | 40 | 60 | 50 | 30 |
| No. of Employees | 60 | 70 | 120 | 30 | 20 |

Expenses charged to the service departments are to be distributed to other departments by the following percentages :

| | X | Y | Z | A | B |
|---|---|---|---|---|---|
| **Department A** | 30 | 30 | 20 | – | 20 |
| **Department B** | 25 | 40 | 25 | 10 | – |

Prepare an overhead distribution statement to show the total overheads of production departments after re-apportioning service departments' overhead by using simultaneous equation method. Show all the calculations to the nearest rupee.

(b) The following accounting information and financial ratios of M Limited relate to the year ended 31st March, 2012 : **8**

| | |
|---|---|
| Inventory Turnover Ratio | 6 Times |
| Creditors Turnover Ratio | 10 Times |
| Debtors Turnover Ratio | 8 Times |
| Current Ratio | 2.4 |
| Gross Profit Ratio | 25% |

Marks

Total sales ₹ 30,00,000; cash sales 25% of credit sales; cash purchases ₹ 2,30,000; working capital ₹ 2,80,000; closing inventory is ₹ 80,000 more than opening inventory.

You are required to calculate :

(i) Average Inventory

(ii) Purchases

(iii) Average Debtors

(iv) Average Creditors

(v) Average Payment Period

(vi) Average Collection Period

(vii) Current Assets

(viii) Current Liabilities

3. (a) Following are the summarized Balance Sheets of JKM Limited as on 31st March, 2011 and 2012 : 12

(₹ in Lakhs)

| Liabilities | 31st March 2011 (₹) | 31st March 2012 (₹) | Assets | 31st March 2011 (₹) | 31st March 2012 (₹) |
|---|---|---|---|---|---|
| Equity Share Capital | 50.00 | 55.00 | Goodwill | 5.00 | 4.20 |
| Capital Reserve | – | 2.50 | Land & Building | 20.00 | 18.00 |
| General Reserve | 4.00 | 6.00 | Plant & Machinery | 22.00 | 31.00 |
| Profit & Loss Account | 5.30 | 6.70 | Investment | 2.00 | 3.50 |
| Proposed Dividend | 8.00 | 11.00 | Stock | 8.60 | 12.70 |
| Bills Payable | 2.00 | 1.80 | Sundry Debtors | 10.20 | 13.00 |
| Sundry Creditors | 3.50 | 4.60 | Bills Receivables | 1.00 | 0.70 |
| Provision for Tax | 4.00 | 5.00 | Cash in hand & Bank | 7.20 | 8.90 |
| | | | Share Issue Exp. | 0.80 | 0.60 |
| | **76.80** | **92.60** | | **76.80** | **92.60** |

Marks

**Additional Information :**

(i) A machine (original cost ₹ 2,80,000; Book Value ₹ 1,70,000) was sold during the year for ₹ 1,50,000.

(ii) Depreciation for 2011-12 was amounted to ₹ 3,00,000 on plant and machinery and ₹ 50,000 on land and building.

(iii) A piece of land had been sold out on 01-11-2011 and the profit on the sale has been credited in capital reserve.

(iv) ₹ 40,000 is received as dividend including ₹ 15,000 pre-acquisition profit, which is credited to investment account.

(v) An interim dividend of ₹ 2,50,000 has been paid during the year 2011-12.

(vi) Income tax paid during the year 2011-12, amounted to ₹ 3,80,000.

Required :

(A) Prepare a schedule of changes in the working capital.

(B) Prepare funds flow statement as on 31st March, 2012.

(b) From the following particulars compute a conservation estimate of profit by 4 methods on a contract which has 80 percent complete : **4**

| | ₹ |
|---|---|
| Total expenditure to date | 8,50,000 |
| Estimate further expenditure to complete the contract | 1,70,000 |
| Contract Price | 15,30,000 |
| Work Certified | 10,00,000 |
| Work not certified | 85,000 |
| Cash received | 8,16,000 |

Marks

4. (a) The standard labour employment and the actual labour engaged in a 40 hours week for a job are as under : **6**

| Category of Workers | Standard | | Actual | |
|---|---|---|---|---|
| | **No. of workers** | **Wage Rate per hour ₹** | **No. of workers** | **Wage Rate per hour ₹** |
| Skilled | 65 | 45 | 50 | 50 |
| Semi-skilled | 20 | 30 | 30 | 35 |
| Unskilled | 15 | 15 | 20 | 10 |

Standard output : 2000 units;   Actual output : 1800 units

Abnormal Idle time 2 hours in the week

Calculate :

(i) Labour Cost Variance

(ii) Labour Efficiency Variance

(iii) Labour Idle Time Variance.

(b) SS Limited is considering the purchase of a new automatic machine which will carry out some operations which are at present performed by manual labour. NM-$A_1$ and NM-$A_2$, two alternative models are available in the market. The following details are collected : **10**

| | | Machine | |
|---|---|---|---|
| | | **NM-$A_1$** | **NM-$A_2$** |
| Cost of Machine | (₹) | 20,00,000 | 25,00,000 |
| Estimated working life | | 5 Years | 5 Years |
| Estimated saving in direct wages per annum | (₹) | 7,00,000 | 9,00,000 |
| Estimated saving in scrap per annum | (₹) | 60,000 | 1,00,000 |
| Estimated additional cost of indirect material per annum | (₹) | 30,000 | 90,000 |
| Estimated additional cost of indirect labour per annum | (₹) | 40,000 | 50,000 |
| Estimated additional cost of repairs and maintenance per annum | (₹) | 45,000 | 85,000 |

Marks

Depreciation will be charged on a straight line method. Corporate tax rate is 30 percent and expected rate of return may be 12 percent.

You are required to evaluate the alternatives by calculating the :

(i) Pay-back Period

(ii) Accounting (Average) Rate of Return; and

(iii) Profitability Index or P.V. Index (P.V. factor for ₹ 1 @ 12% 0.893; 0.797; 0.712; 0.636; 0.567; 0.507)

5. (a) Briefly explain the essential features of a good cost accounting system. 4×4 =16

(b) What is inter-process profit ? State its advantages and disadvantages.

(c) What do you understand by operating costing ? How are composite units computed ?

(d) List the fundamental principles governing capital structure.

6. (a) The following figures are related to LM Limited for the year ending 31st March, 2012 : 8

Sales – 24,000 units @ ₹ 200 per unit;

P/V Ratio 25% and Break-even Point 50% of sales.

You are required to calculate :

(i) Fixed cost for the year

(ii) Profit earned for the year

(iii) Units to be sold to earn a target net profit of ₹ 11,00,000 for a year.

(iv) Number of units to be sold to earn a net income of 25% on cost.

(v) Selling price per unit if Break-even Point is to be brought down by 4,000 units.

Marks

(b) R Limited showed a net loss of ₹ 35,400 as per their cost accounts for the year ended 31st March, 2012. However, the financial accounts disclosed a net profit of ₹ 67,800 for the same period. The following information were revealed as a result of scrutiny of the figures of cost accounts and financial accounts : 8

| | | ₹ |
|---|---|---|
| (i) | Administrative overhead under recovered | 25,500 |
| (ii) | Factory overhead over recovered | 1,35,000 |
| (iii) | Depreciation under charged in Cost Accounts | 26,000 |
| (iv) | Dividend received | 20,000 |
| (v) | Loss due to obsolescence charged in Financial Accounts | 16,800 |
| (vi) | Income tax provided | 43,600 |
| (vii) | Bank interest credited in Financial Accounts | 13,600 |
| (viii) | Value of opening stock : | |
| | In Cost Accounts | 1,65,000 |
| | In Financial Accounts | 1,45,000 |
| (ix) | Value of closing stock : | |
| | In Cost Accounts | 1,25,500 |
| | In Financial Accounts | 1,32,000 |
| (x) | Goodwill written-off in Financial Accounts | 25,000 |
| (xi) | Notional rent of own premises charged in Cost Accounts | 60,000 |
| (xii) | Provision for doubtful debts in Financial Accounts | 15,000 |

Prepare a reconciliation statement by taking costing net loss as base.

7. Answer any **four** of the following : 4×4 =16

(a) Discuss the conflicts in profit verses wealth maximization principle of the firm.

(b) State the considerations on which capital expenditure budget is prepared.

(c) Distinguish between business risk and financial risk.

(d) What are the forms of bank credit ?

(e) "Financing a business through borrowing is cheaper than using equity." Briefly explain.