## U.S.N



## P.E.S. College of Engineering, Mandya - 571401

(An Autonomous Institution affiliated to VTU, Belagavi)
Third Semester, Master of Business Administration (MBA)
Semester End Examination; Jan. / Feb. - 2021
Advanced Financial Management
Time: 3 hrs
Max. Marks: 100
Note: Answer all FOUR full questions from PART - A and PART - B (Case Study) is compulsory.
Q. No.

Questions
PART - A
1 a. Prepare Pro-forma income statement for the month of January, February and March, 2007 for $\mathrm{M} / \mathrm{s}$ Bharath Motors from the following information given below:
i) Sales are projected at ${ }^{`} 2,00,000, ` 2,50,000$ and ${ }^{`} 3,00,000$ for January, February and March, 2007 respectively.
ii)Cost of goods are sold at estimated at `\(1,00,000,` 1,20,000\) and 1,30,0000 for January, February and March, 2007 respectively.
iii) Selling expenses are estimated to be $5 \%$ of the value of sales.
iv) Rent is ${ }^{`} 7,000$ per month, administrative expenses for January 2007 are expected to be 50,000 but an increase of $2 \%$ per month over the previous month's administrative expenses is projected.
v) The company has ` $1,00,000$ of $10 \%$ of loan, interest payable monthly.
vi) Corporate tax rate if $50 \%$.
b. Classify the following items into $A, B \& \mathrm{C}$ categories.

| Items | Annual Usage | Price / unit |
| :---: | ---: | ---: |
| 01 | 10,000 | 0.50 |
| 02 | 200 | 100.00 |
| 03 | 400 | 80.00 |
| 04 | 7,000 | 1.50 |
| 05 | 1,000 | 1.20 |
| 06 | 1,500 | 0.80 |
| 07 | 600 | 50.00 |
| 08 | 1,200 | 0.40 |
| 09 | 300 | 0.60 |
| 10 | 70 | 500.00 |
| 11 | 2,000 | 2.00 |
| 12 | 5,000 | 1.50 |

## OR

2 a . M/s Apathy Co. Ltd. has received an offer of quantity discount on its order for materials as under.

| Price per ton (Rs.) | Tons number |
| :---: | :---: |
| 9,600 | Less than 50 |
| 9,360 | 50 and less than 100 |
| 9,120 | 100 and less than 200 |
| 8,880 | 200 and less than 300 |
| 8,640 | 300 and above |

The annual requirement for the materials is 500 tons. The ordering cost per unit is ${ }^{`} 12,500$ and the stock holding cost is estimated a $25 \%$ of the material cost per annum. You are required to,
i) Compute the most economical purchase level
ii) Compute EOQ if there are no quantity discounts and the price per ton is ${ }^{`} 10,500$
b. Two components ' $A$ ' and ' $B$ ' are used in $M / s$ Swasthic Industries, Pune as follows:

Normal usage: 150 units per week each,
Minimum usage: 75 units per week each,
Maximum usage: 225 units per week each,

| Re-order Quantity : | A - 900 units <br> B $-1,500$ units | Re-order period: | A -4 to 6 weeks <br> B -2 to 4 weeks. |
| :--- | :--- | :--- | :--- |

Calculate for each component;
i) Re-order level
ii) Maximum Level
iii) Minimum Level
iv) Average Stock Level

3 a . Following is the information relating to ABC Ltd and XYZ Ltd.

| Type of Assets | ABC Ltd. | XYZ Ltd. |
| :---: | :---: | :---: |
| Current Assets (') | 200 Million | 80 Million |
| Net fixed Assets (') | 80 million | 200 Million |
| Total Assets ( ') | 280 million | 280 million |
| EBIT ( ) | 700 million | 700 million |
| ROI (\%) | 25 | 25 |

You are required to compute working capital leverage with a $20 \%$ increase and $20 \%$ decrease in current assets.
b. Briefly explain the various sources of financing working capital.

## OR

4 a. Company X and Company Y is in the same risk and is identical in every respect except that Company X uses debt while company Y does not. The levered firm has `\(9,00,000\) debentures, carrying \(10 \%\) rate of interest. Both the firms earn \(20 \%\) operating income profit on their total assets of` 15 lakhs. Assume perfect capital market, rational investors and so on, tax rate of $35 \%$ and capitalization rate of $15 \%$ for an all equity company.
i) Calculate the value of firms $X$ and $Y$ using Net Income Approach
ii) Calculate the value of each firm using the Net Operating Income (NOI) approach
b. Explain briefly the concept of net income and net operating income approaches.

5 a. What are the 5C's of traditional credit analysis? Explain each in brief.
b. M/s Niranjana Co. Ltd desire to introduce credit facility to its customers in an effort to improve sales. It is expected that sales would go up by `24 lakhs per year. The Finance Manager has worked out the following issues involved in credit business; i) A margin of 5\% may turn out as bad debts, ii) Since cash cycle is affected by the action, special arrangement needs to be made with their bankers for additional funds which are at 16 per cent per annum. iii) Credit period would be for 30 days and may require employing a person to keep track of customers with their due dates and follow up. Salary for the employee would be` 6000 per month.
iv) The contribution margin of M/s Niranjana Co. Ltd. is $10 \%$
v) If Miscellaneous additional administration overheads on introduction of the credit scheme per year are ` 40,000 , do you advise this scheme?

## OR

6 a. X ltd. has 50,000 equity shares of `10 each outstanding on January 1. The shares are currently being quoted at par in the market. The company now intends to pay a dividend of` 2 per share for the current calendar year. It belongs to a risk class whose appropriate capitalization is $15 \%$. Using MM approach find the price of the company. Also find out the number of new equity shares that company must issue to meet it investment need of ${ }^{`} 2,00,000$ assuming a Net income of 1.1 lakh and also assume that dividend is paid. Determine the value of firm.
b. The Apex company which earns `5 per share is capitalizes at \(10 \%\) and as a return on investment of \(12 \%\). Using Walter's dividend policy model determine optimum dividend payout ratio and price of the shares at the payout. It currently has 1 lakh shares selling at` 100 each. The firm is contemplating the declaration of `5 as dividend at the end of current financial year. What will be the price of the shares at the end of the year if dividend is not declared? What will be if it is paid? Answer this on the basis of MM model and assume no taxes. 7 a . Explain the motives for holding the cash. b. M/s Tally Ltd. requires` 3 million in cash for meeting its transaction needs over the next six months. M/s Tally ltd. currently has the amount in form of marketable securities. The cash payments will be made evenly over the six months planning period. M/s Tally Ltd. earned $12 \%$ annual yield on its marketable securities. The conversion of marketable securities into cash entails a fixed cost of ` 1000 per transaction. What is the optimal conversion size as per Baumol Model?

## OR

Contd... 4

8 a . The following are the results expected M/s XYZ Ltd. by Quarters next year, in thousands of rupees.

| Particulars | Quarters (Rs. in 000) |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 |
| Sales | 7,500 | 10,500 | 18,000 | 10,500 |
| Cash payment : Production cost | 7,000 | 10,000 | 8,000 | 8,500 |
| Selling Administration and Other costs | 1,000 | 2000 | 2,900 | 1600 |
| Purchase of Plant and Other Fixed assets | 100 | 1100 | 2100 | 2100 |

The debtors at the end of a quarter are one third of sales for the quarter. The opening balance of debtors is `\(30,00,000\). Cash on hand at the beginning of the year is` $6,50,000$ and the desired minimum cash balance is `\(5,00,000\). Borrowings are made at the beginning of Quarter in which the need will occur in multiples of` 10,000 and are repaid at the end of the quarters. Interest charged may be ignored. You are required to prepare cash budgets by quarters for the year.
b. Ram-Lakhan Paper Pulps Ltd has experience of a Stochastic demand for its products with the result that cash balance fluctuates randomly. The standard deviation of daily net cash flow is `1000. The company wishes to make the transfer of funds from cash to marketable securities and vice versa as automatic as possible. It has heard that this can be done by imposing upper and lower control bound control limits. The current interest rate on marketable securities is \(6 \%\). The fixed cost associated with each transfer is` 100 . What are the optimal upper and lower bound control limits if minimum cash balance is 50,000 ? Assume 360 day year.

## PART - B (Case Study Compulsory)

9. M/s Geetha Silks and M/s Ramya Silks belong to the same risk class. Those firms are identical in all except accepts that M/s Geetha Silks has no debt in its capital structure, whereas M/s Ramya Silks as 280 lakhs of $12 \%$ debentures outstanding. There are no taxes and capital markets are assumed to be perfect. The valuation of these firms is as follows:

| Particulars | M/s Geetha Silks | M/s Ramya Silks |
| :--- | ---: | ---: |
| Net Operating income ( ${ }^{\circ}$ ) | $84,00,000$ | $84,00,000$ |
| Equity Earnings ( ${ }^{\prime}$ ) | $84,00,000$ | $50,40,000$ |
| Equity Capitalization rate | 0.15 | 0.16 |
| Market value of equity ( ${ }^{\prime}$ ) | $5,60,00,000$ | $3,15,00,000$ |
| Market value of debt ( ${ }^{\prime}$ ) | - | $2,80,00,000$ |
| Total market value of firm ( ${ }^{`}$ ) | $5,60,00,000$ | $5,95,00,000$ |

Show the process and the amount by which X could reduce his outlay through the use of arbitrage.

