## IQRA NATIONAL UNIVERSITY

Name:
ID:
Subject:
Semester:
Submitted to:
Exam:

Sifatullah
\#14678
Business Finance
$4^{\text {th }}$
Ms. Maryam Saleem
Final Term

Question: $\left.1^{\text {st }}\right)$ Altas Construction Company sells construction material on terms of 2/10, net 30. Its financial statements over the last two years are as follows:

| BALANCE SHEET | 20X1 |
| :--- | :---: |
| Cash | $\$ 40,000$ |
| Account receivable | $5,00,000$ |
| Inventories | $3,00,000$ |
| Net fixed assets | $\underline{6,00,000}$ |
|  | $\$ 14,40,000$ |
| Accounts payable | $2,50,000$ |
| Accruals | $2,20,000$ |
| Bank loan, Short-term | $1,50,000$ |
| Long-term debt | $4,00,000$ |
| Common stock | $2,00,000$ |
| Retained earnings | $\underline{6,00,000}$ |
|  |  |
| Sales | $50,00,000$ |
| Cost of goods sold | $40,00,000$ |
| Net profit | $4,00,000$ |

Calculate the following ratios for Altas Construction Company for 20X1 ( $\mathbf{1 5}$ marks)
(a) Acid-test ratio:

> Current Assets - Inventory

Current Liabilities
$40,000+500,000+300,000-300,000$
$250,000+220,000+150,000$

$$
\frac{840,000-300,000}{620,000}=
$$

$$
\frac{540000}{620000}=0.87
$$

(b) Inventory turnover:

Cost of Goods sold
Average Inventories

$$
\frac{4,000,000}{300,000}=13.33
$$

(c) Total debt/equity:

Total Debt
Total Equity
$\frac{250000+22000+150000+400000}{200000+600000}=$
$\frac{1020000}{800000}=1.275$
(d) Long Term Debt to Total Capitalization Ratio:
$\frac{\text { Long Term Debt }}{\text { Total Capitalization }}$
$\frac{2000}{2000+3440}=\frac{2000}{5440}=0.36$
(e) Net profit margin:

Net Profit
Net Sales
$\frac{400000}{5000000}=0.08$
(f) Total asset turnover:


Question: $\mathbf{2}^{\text {nd }}$ ) ABC Company has outstanding a 10 percent, five-year, \$1000-par-value bond on which interest is paid annually.
(a) If the market required rate of return is 15 percent, what is the market value of the bond?
(5 marks)

## Solution:

A. Coupon Rate $=10 \%$

$$
\begin{aligned}
& \mathrm{n}=5 \\
& \mathrm{MV}=1000 \\
& \mathrm{kd}=15 \% \\
& \mathrm{I}=100
\end{aligned}
$$

$$
\begin{aligned}
& =\mathrm{I}\left(\mathrm{PVIFA}_{\mathrm{kd}, \mathrm{n}}\right)+\mathrm{MV}\left(\mathrm{PVIF}_{\mathrm{kd,n}}\right) \\
& =100(3.3522)+1000(0.4972) \\
& =335.22+497.2 \\
& =832.42
\end{aligned}
$$

(b) If the coupon rate were 8 percent instead of 10 percent, and market required rate of return was 12 percent, what would be the market value of the bond

## Solution:

$$
\begin{aligned}
& \mathrm{I}=80 \\
& \begin{aligned}
\mathrm{kd}=12 \% \\
\mathrm{n}=5
\end{aligned} \\
& \quad=\mathrm{I}\left(\mathrm{PVIFA}_{\mathrm{kd,n}}\right)+\mathrm{MV}\left(\mathrm{PVIF}_{\mathrm{kd,n}}\right) \\
& \\
& =80(3.6048)+1000(0.5674) \\
& \\
& =288.384+567.4 \\
& \\
& =855.784
\end{aligned}
$$

Question: $\mathbf{3}^{\text {rd }}$ ) Differentiate between the following concepts with an example: (3+3+4=10)
i. Liquidation value versus going-concern value

Going-concern value represents the monetary value that can reasonably be expected to be received from continuing business operations, and liquidation value represents the total sales value of all company-owned assets.

## ii. Market value versus intrinsic value

## a) Market value:

It is the current price of an assets at which it is traded.
For Example: a person selling is House at 50 lakhs.
b) Intrinsic value:

It is the internal value of assets, it is the measure of an asset worth based on the facts, the return it will gave its lifespan, future, earning.

## iii. Bonds with finite versus infinite maturity

a) Bond with finite maturity:

It is bond which as ending date, it as maturity date.
For Example: Ali issue bond for two years. After two years Ali get interest with principle amount.
b) Bond with infinite Maturity:

It is the bond that never matures, those are bond that have no maturity date, and they are issue infinite time and has no ending.
For Example: Perpetual bonds have infinite maturity those bonds provide a fixed amount of interest forever, those are very rare.

## Question: $4^{\text {th }}$ )

(a) Ali Foods Company has current assets of $\$ 10,00,000$ and current liabilities of $\$ 700,000$. What effect would the following transactions have on the firm's current ratio? Also state the resulting figures.

## Current Ratio:

## Current Assets

Current Liabilities

$$
\frac{1000000}{700000}=1.4285
$$

i. Two new trucks are purchased for a total of $\$ 2,00,000$ in cash:

## Solution:

$$
\frac{1000000-200000}{700000}=
$$

$$
\frac{800000}{700000}=1.1428
$$

ii. The company borrows $\$ 50,000$ short term to carry an increase in receivables of the same amount.

## Solution:

$$
\begin{gathered}
=\frac{1000000+50000}{700000+50000} \\
=\frac{1050000}{750000} \\
=1.4
\end{gathered}
$$

(b) Johnson Cement Company has a 10 percent preferred stock issue outstanding, with each share having a $\$ 100$ face value. Currently, the yield is 12 percent. What is the market price per share? If interest rates in general should rise so that the required return becomes 14 percent, what will happen to the market price per share?
(9 marks)

## Solution "b":

$$
\begin{aligned}
& \mathbf{d p}=\mathbf{1 0 \%} \\
& \mathrm{kp}=12 \%=0.12 \\
& \qquad \mathrm{v}=\frac{d p}{k p} \\
& =\frac{10}{0.12} \\
& =83.33
\end{aligned}
$$

$\mathbf{k p}=\mathbf{1 4 \%}=0.14$

$$
\mathrm{kp}=\frac{10}{0.14}=71.42
$$

