

**FINALTERM EXAMINATION Spring 2009**

**MGT201- Financial Management (Session - 3)**

**Question No: 1 ( Marks: 1 ) - Please choose one**

Which of the following type of lease is a long-term lease that is not cancelable and its life often matches the useful life of the asset?

▶ **A financial (confirm JAEK.SHIM BOOK )**

- ▶ An operating
- ▶ Both financial & operating lease
- ▶ None of the given options

An operating lease refers to a short-term lease that is often cancelable. For example, a lease for office space represents this type of lease where the lease life is less than the useful life of the asset

**Question No: 2 ( Marks: 1 ) - Please choose one**

Among the pairs given below select a(n) example of a principal and a(n) example of an agent respectively.

▶ **Shareholder; manager (REPEAT)**

- ▶ Manager; owner
- ▶ Accouor ntant; bondholder
- ▶ Shareholder; bondholder

**Question No: 3 ( Marks: 1 ) - Please choose one**

What is the present value of Rs.8,000 to be paid at the end of three years if the interest rate is 11%?

▶ **Rs.5,850**

▶ Rs.4,872

▶ Rs.6,725

▶ Rs.1,842

$$8000/(1.11)^3 = 5850$$

**Question No: 4 ( Marks: 1 ) - Please choose one**

What is the present value of Rs.717 to be paid at the end of 2 years if the interest rate is 9%?

▶ **Rs.604**

▶ Rs.417

▶ Rs.715

▶ Rs.556

$$717/(1.09)^2 = 604$$

**Question No: 5 ( Marks: 1 ) - Please choose one**

As interest rates go up, the present value of a stream of fixed cash flows \_\_\_\_\_.

▶ **Goes down (REPEAT)**

▶ Goes up

▶ Stays the same

► Can not be found

**Question No: 6 ( Marks: 1 ) - Please choose one**

An 8-year annuity due has a present value of Rs.1,000. If the interest rate is 5 percent, the amount of each annuity payment is closest to which of the following?

► Rs.154.73

► **Rs.147.36**

► Rs.109.39

► Rs.104.72

$$1000 \cdot (1.05)^8$$

**Question No: 7 ( Marks: 1 ) - Please choose one**

A capital budgeting technique that is **NOT** considered as discounted cash flow method is:

► **Payback period**

► Internal rate of return

► Net present value

► Profitability index

only to method discounted cash flow

1) IRR

2) NPV.

**Question No: 8 ( Marks: 1 ) - Please choose one**

In which of the following situations you can expect multiple answers of IRR?

- ▶ More than one sign change taking place in cash flow diagram
- ▶ There are two adjacent arrows one of them is downward pointing & the other one is upward pointing
- ▶ During the life of project if you have any net cash outflow
- ▶ **All of the given options (PAGE 53)**

**Question No: 9 ( Marks: 1 ) - Please choose one**

The value of a bond is directly derived from which of the following?

- ▶ Cash flows
- ▶ Coupon receipts
- ▶ Par recovery at maturity
- ▶ **All of the given options (repeat)**

**Question No: 10 ( Marks: 1 ) - Please choose one**

Which of the following is a characteristic of a coupon bond?

- ▶ **Pays interest on a regular basis (typically every six months) sure (repeat)**
- ▶ Does not pay interest on a regular basis but pays a lump sum at maturity
- ▶ Can always be converted into a specific number of shares of common stock in the issuing company

- ▶ Always sells at par

**Question No: 11 ( Marks: 1 ) - Please choose one**

A zero-coupon bond has a yield to maturity of 9% and a par value of Rs.1,000. If the bond matures in 8 years, the bond should sell for a price of \_\_\_\_\_ today.

- ▶ Rs. 422.41
- ▶ **Rs. 501.87**
- ▶ Rs. 513.16
- ▶ Rs. 483.49

$$\begin{aligned}\text{price of bond} &= \text{pv of coup pyament} + \text{pv of face vlue} \\ &= 1000 / (1.09)^8 \\ &= 501\end{aligned}$$

**Question No: 12 ( Marks: 1 ) - Please choose one**

When a bond will sell at a discount?

- ▶ The coupon rate is greater than the current yield and the current yield is greater than yield to maturity
- ▶ The coupon rate is greater than yield to maturity
- ▶ The coupon rate is less than the current yield and the current yield is greater than the yield to maturity
- ▶ **The coupon rate is less than the current yield and the current yield is less than yield to maturity**

The coupon rate is less than the current yield and the current yield is less than yield to maturity

In order for the investor to earn more than the current yield the bond must be selling for a discount. Yield to maturity will be greater than current yield as investor will have purchased the bond at discount and will be receiving the coupon payments over the life of the bond

**Question No: 13 ( Marks: 1 ) - Please choose one**

Which of the following is the variability of return on stocks or portfolios not explained by general market movements. It is avoidable through diversification?

- ▶ Systematic risk
- ▶ Standard deviation
- ▶ **Unsystematic risk**
- ▶ Financial risk

Ref (JAE K.SHIM BOOK)

Systematic risk is not avoidable through diversification

**Systematic risk is undiversified and uncontrollable**

**Unsystematic risk is diversified and controllable**

**Question No: 14 ( Marks: 1 ) - Please choose one**

According to the Capital Asset Pricing Model (CAPM), which of the following combination is equal to the expected rate of return on any security?

- ▶  $R_f + \beta[E(R_M)]$
- ▶  **$R_f + \beta[E(R_M - R_f)]$**
- ▶  $R_f + \beta[E(R_M) - R_f]$
- ▶  $E(R_M) + R_f$

**$E(R) = R_f + \beta(R_M - R_f)$**

**Question No: 15 ( Marks: 1 ) - Please choose one**

What is the expected return of a zero-beta security?

- ▶ **The risk-free rate**
- ▶ Zero rate of return
- ▶ A negative rate of return
- ▶ The market rate of return

**Question No: 16 ( Marks: 1 ) - Please choose one**

How the beta of a stock can be calculated?

- ▶ By monitoring price of the stock
- ▶ By monitoring rate of return of the stock
- ▶ By comparing the changes in the stock market price to the changes in the stock market index
- ▶ **All of the given options**

**SEE LESSON 25 I AM SURE 100% ABOUT THIS ANSWER**

**Question No: 17 ( Marks: 1 ) - Please choose one**

If stock is a part of totally diversified portfolio then its company risk must be equal to:

- ▶ **0**
- ▶ 0.5
- ▶ 1
- ▶ -1

**Question No: 18 ( Marks: 1 ) - Please choose one**

How can you limit company-specific risks?

- ▶ Invest in that company's bonds
- ▶ **Invest in a variety of stocks**
- ▶ Invest in securities that do well in a recession
- ▶ Invest in securities that do well in a boom

Rationale: Company-specific risks. Operating risk and price risk are two factors contributing to short-term volatility of individual stocks. Operating risk is the risk to the company as a business and includes anything that might adversely affect the company's profitability. Price risk, meanwhile, has more to do with the company's stock than with its business. How expensive is the stock compared with the company's earnings, cash flow, or sales?

To limit company-specific risk, own a collection of stocks rather than just a few.

**Question No: 19 ( Marks: 1 ) - Please choose one**

Find the Risk-Free Rate given that the Expected Return on Stock is 12.44%, the Expected Return on the Market Portfolio is 13.4%, and the Beta for Stock is 0.9.

- ▶ **3.8%**
- ▶ 4.9%
- ▶ 5.34%
- ▶ 6.38%

Working:

$$\begin{aligned} r &= r_{RF} + (r_M - r_{RF}) \beta \\ r &= r_{RF} + \beta * r_M - \beta * r_{RF} \\ r &= (1-\beta) r_{RF} + \beta * r_M \\ (1-\beta) r_{RF} &= r - \beta * r_M \\ r_{RF} &= (r - \beta * r_M) / (1-\beta) \\ &= (12.44 - (0.9 * 13.4)) / (1 - 0.9) \end{aligned}$$



=3.8%

#### ANOTHER SOLUTION

*hit and trial method on this mcq.*

$$r = r_{RF} + (r_M - r_{RF}) \beta$$

$$r_{RF}=3.8$$

$$\beta= 0.9$$

$$r_M =13.4\%$$

$$r_{RF}=3.8\%$$

by putting these values in the equation u will get=12.44%, which is the expected return on stock.(as mentioned in the question). thats all I know.

**Question No: 20 ( Marks: 1 ) - Please choose one**

Which of the following can be used to calculate the risk of the larger portfolio?

- ▶ Standard deviation
- ▶ EPS approach
- ▶ **Matrix approach (page 98)**
- ▶ Gordon's Approach

we can calculate the risk of larger portfolio using the **Matrix approach**

**Question No: 21 ( Marks: 1 ) - Please choose one**

Market risk is measured in terms of the \_\_\_\_\_ of the market portfolio or index.

- ▶ Variance
- ▶ Covariance
- ▶ **Standard deviation (page 102)**
- ▶ Correlation coefficient

Ref. Page No.102: Market Risk is measured in terms of the Standard Deviation (or Volatility) of the Market Portfolio or Index

**Question No: 22 ( Marks: 1 ) - Please choose one**

If 2 stocks move in the same direction together then what will be the correlation coefficient?

- ▶ 0
- ▶ **1.0 (PAGE 116)**
- ▶ -1.0
- ▶ 1.5

Rationale: The strength of the correlation between two variables such as two stock prices is measured by the correlation coefficient. If two stock prices have perfect positive correlation, their correlation coefficient will have the value of +1.

**Question No: 23 ( Marks: 1 ) - Please choose one**

Which of the following is **NOT** the cost of equity?

- ▶ The minimum rate that a firm should earn on the equity-financed part of an investment
- ▶ **Generally lower than the before-tax cost of debt**
- ▶ It is the most difficult cost component to estimate
- ▶ None of the given options

**Question No: 24 ( Marks: 1 ) - Please choose one**

Assume management is looking at a set of possible projects with regards to their expected NPV, standard deviation, and management's risk attitude. The firm should attempt to take the set of projects \_\_\_\_\_.

- ▶ That falls on the lowest indifference curve
- ▶ **That falls on the highest indifference curve**
- ▶ That has the lowest standard deviation
- ▶ That has the highest standard deviation

Rationale: The lowest indifference curve generates the lowest satisfaction by management with that set of projects.

**Question No: 25 ( Marks: 1 ) - Please choose one**

The overall (weighted average) cost of capital is composed of weighted averages of which of the following?

- ▶ The cost of common equity and the cost of debt
- ▶ The cost of common equity and the cost of preferred stock
- ▶ The cost of preferred stock and the cost of debt
- ▶ **The cost of common equity, the cost of preferred stock, and the cost of debt**

**Question No: 26 ( Marks: 1 ) - Please choose one**

How economic value added (EVA) is calculated?

- ▶ It is the difference between the market value of the firm and the book value of equity
- ▶ **It is the firm's net operating profit after tax (NOPAT) less a dollar cost of capital charge**
- ▶ It is the net income of the firm less a dollar cost that equals the WAAC only

- ▶ None of the given options

**Question No: 27 ( Marks: 1 ) - Please choose one**

Upon which of the following a firm's degree of operating leverage (DOL) depends primarily?

- ▶ Sales variability
- ▶ Level of fixed operating costs
- ▶ **Closeness to its operating break-even point**
- ▶ Debt-to-equity ratio

REF:

**EBIT AND SALE RELATIONSHIP**

**Question No: 28 ( Marks: 1 ) - Please choose one**

A firm has a DFL of 3.5 at X dollars. What does this tell us about the firm?

- ▶ If sales rise by 3.5% at the firm, then EBIT will rise by 1%
- ▶ If EBIT rises by 3.5% at the firm, then EPS will rise by 1%
- ▶ **If EBIT rises by 1% at the firm, then EPS will rise by 3.5%**
- ▶ If sales rise by 1% at the firm, then EBIT will rise by 3.5%

**$3.5\% / 1\% = 3.5$  (EBIT AND EPS RELATION)**

**Question No: 29 ( Marks: 1 ) - Please choose one**

For an all-equity firm, what is the effect of EBIT on the EPS?

- ▶ **As earnings before interest and taxes (EBIT) increases, the earnings per share (EPS) increases by the same percent**
- ▶ As EBIT increases, the EPS increases by a larger percent
- ▶ As EBIT increases, the EPS decreases
- ▶ None of the given options

**Question No: 30 ( Marks: 1 ) - Please choose one**

The beta of an all-equity firm is 1.2. If the firm changes its capital structure to 50% debt and 50% equity using 8% debt financing, what will be the beta of the levered firm? The beta of debt is 0.2. (Assume no taxes.)

- ▶ 1.2
- ▶ 2.4
- ▶ **2.2**
- ▶ 1.8

**Question No: 31 ( Marks: 1 ) - Please choose one**

The Serfraz Company is financed by Rs. 2 million (market value) in debt and Rs. 3 million (market value) in equity. The cost of debt is 10% and the cost of equity is 15%. Calculate the weighted average cost of capital. (Assume no taxes.)

- ▶ 10%
- ▶ 15%
- ▶ **13%**
- ▶ 8%

$$V = 2\text{Million} + 3\text{Minillion} = 10\text{Million}$$

$$\text{WCCA} = 2/5 * 10\% + 3/5 * 15\% = 13\%$$

**Question No: 32 ( Marks: 1 ) - Please choose one**

Which of the following expressed the proposition that the value of the firm is independent of its capital structure?

- ▶ The Capital Asset Pricing Model
- ▶ **M&M Proposition I**

- ▶ M&M Proposition II
- ▶ The Law of One Price

According to M&M's Proposition I, the value of a firm is independent of the financing mix of the firm. Thus, managers cannot alter firm value by their choice of the relative amounts of debt and equity financing. According to M&M, the value of the firm is determined by the size and riskiness of the real cash flows generated by the firm's assets, and not by how these cash flows are divided between the debt and equity stakeholders of the firm. These results hold under the assumption of perfect capital markets with no corporate or personal taxes. Under perfect capital markets, investors face no transactions costs and are symmetrically informed. In addition, firms can borrow and lend at the risk-free rate and can issue securities with no issuance costs

**Question No: 33 ( Marks: 1 ) - Please choose one**

Which of the following could **NOT** be defined as the capital structure of the Company?

- ▶ The firm's mix of Assets and liabilities
- ▶ The firm's debt-equity ratio
- ▶ All of the given option
- ▶ **The firm's common stocks only**

Capital structure refers to the way a corporation finances its assets through some combination of equity, debt, or hybrid securities

**Question No: 34 ( Marks: 1 ) - Please choose one**

Which of the following would express the negative net worth of a firm?

- ▶ Experiencing a business failure
- ▶ A legal bankruptcy
- ▶ Experiencing technical insolvency
- ▶ **Experiencing accounting insolvency**

**Assets less liabilities are net worth if liabilities are more than assets than net worth is negative.**

**Question No: 35 ( Marks: 1 ) - Please choose one**

Suppose that the Euro is selling at a forward discount in the forward-exchange market. This implies that most likely \_\_\_\_\_.

- ▶ The Euro has low exchange-rate risk
- ▶ The Euro is gaining strength in relation to the dollar
- ▶ **Interest rates are higher in Euroland than in the United States**
- ▶ Interest rates are declining in Europe

**ref**

**FARWARD EXCHANGE RATE IS A MARKET FOR CONTACT THAT ENSURE THE FUTURE DELIVERY IF A FOREGIN CURRENCY AT S SPECIFIC EXCHANGE RATE**

**Question No: 36 ( Marks: 1 ) - Please choose one**

Which of the following term is used when the firm can independently control considerable assets with a very limited amount of equity?

- ▶ Joint venture
- ▶ **Leveraged buyout (LBO) LESSON 43**
- ▶ Spin-off
- ▶ Consolidation

**Ref:** The acquisition of another company using a significant amount of borrowed money (bonds or loans) to meet the cost of acquisition. Often, the assets of the company being acquired are used as collateral for the loans in addition to the assets of the acquiring company. The purpose of leveraged buyouts is to allow companies to make large acquisitions without having to commit a lot of capital.

**Question No: 37 ( Marks: 1 ) - Please choose one**

Which of the following is **NOT** a reason that DeStore.com would prefer to pay a stock dividend rather than a regular cash dividend?

- ▶ **It decreases the supply of shares and enhances shareholder wealth**
- ▶ It may conserve cash for other firm needs
- ▶ It will reduce the stock price
- ▶ The investors anticipates that it cannot convey credibly otherwise

**Question No: 38 ( Marks: 1 ) - Please choose one**

After the payment of a 25% stock dividend, an investor has 500 shares of stock and Rs. 400 total value. What did the investor have prior to the stock dividend?

- ▶ 375 shares of stock and Rs. 375 total value
- ▶ **400 shares of stock and Rs. 400 total value**
- ▶ 400 shares of stock and Rs. 500 total value
- ▶ 625 shares of stock and Rs. 400 total value

because stock dividend did not increase the value. It only increases the number of stocks.

**Question No: 39 ( Marks: 1 ) - Please choose one**

What is the proportion of assets in debt financing for a firm that expects a 24% return on equity, a 16% return on assets, and a 12% return on debt? Ignore taxes.

- ▶ 54.0%
- ▶ 60.0%
- ▶ **66.7%**
- ▶ 75.0%



**Question No: 40 ( Marks: 1 ) - Please choose one**

When financial disaster is looming, why management may borrow to invest in projects having a negative expected NPV?

- ▶ The firm's beta is now negative
- ▶ Taxes are no longer a concern
- ▶ The interest tax shield will cover the loan costs
- ▶ **The lender bears all the risk**

**Question No: 41 ( Marks: 5 )**

Zee Zee Tops Inc., manufacturer's plaid vinyl and chenille cartops for convertibles. These roofs sell for Rs. 200 each and have an associated variable cost per unit of Rs. 120. Management fully expects next year's sales and NOI to drop sharply, by 20% and 50%, respectively, due to lack of demand (i.e., "consumer resistance"). If Zee Zee's current level of production and sales is 112 car tops, what is the level of fixed costs?

**Solution**

**C/S ratio = contribution margin / sales**

$$= 80 / 200$$

$$= .4$$

**Break even sales = fixed cost / C/S ratio**

$$200 = \text{fixed cost} / .4$$

$$200 \times .4 = \text{fixed cost}$$

$$\mathbf{80 = fixed cost}$$

**It is supposed that sales is break even sales in breakeven situation contribution equal to fixed cost.**

**Question No: 42 ( Marks: 5 )**

How working capital affects performance of a business?

### **ANSWER**

**Working capital is the life blood of every business. Without which business cannot be run at all.**

**Working capital = current assets**

**Net working capital = C A - CL**

**If sufficient raw material is available with the company, the will never be out of stock and production will never be stopped. In this production will be more, sales will also be more and resultantly profit will also increase short term liquidity of the company will be sound and the company will never become bankrupt**

**Question No: 43 ( Marks: 10 )**

Hoskins Hiking Boot Company is trying to devise an appropriate working capital policy. Their most recent balance sheet is as follows:

ASSETS		LIABILITIES AND OWNER'S EQUITY	
Cash	Rs.30	Accounts payable	Rs.35
Accounts receivable	50	Notes payable	10
Inventories	30	Accruals	5
Current Assets	110	Current liabilities	50
Net fixed assets	150	Mortgage loan (at 13%)	80
		Common equity	130
		Total liabilities &	
Total assets	Rs.260	Owner's equity	Rs.260

You know that net profits in 2004 were Rs.28, 000.

a. What is Hoskin's current level of gross and net working capital? **(Marks 2)**

### **SOLUTION**

**CURRENT ASSETS 110 GROSS WORKING CAPITAL**

**NET WORKING CAPITAL = CA 110 – CL 50**

**=60**

b. What percentage of total assets is invested in gross working capital? **(Marks 1)**

**GROSS WORKING CAPITAL / TOTAL ASSETS**

$110 / 260 * 100 = 42.30\%$

c. Calculate Hoskins' return on investment. **(Marks 2)**

**Net profit / equity \*100**

$28000 / 130000 * 100 = 21.53\%$

or

$= [\text{Net Income} / \text{Total Assets}] \times 100$

$28000 / 260000 * 100 = 10.76$

d. Suppose the firm reduces cash, accounts receivable, and inventory by 10% and uses the proceeds to pay off some of its accounts payable. Now, assuming all other items remain the same, answer a, b, and c above using these new figures. **(Marks 5)**

**REDUCE 10% CASH , ACCOUNT RECEIVABLE , INVENTORY**

**CASH     $30 * 10\% = 3$**

**CASH = 27**

**ACCOUNT RECEIVABLE    $50 * 10\% = 5$**

**A/ R = 45**

**INVENTORY  $30 * 10\% = 3$**

**INVENTORY = 27**

**TOTAL REDUCE = 11**

ACCOUNTS PAYABLE = 35 -11

A/P = 24

**A) GROSS WORKING CAPITAL**

CURRENT ASSETS IS GROSS WORKING CAPITAL = 99

**NET WORKING CAPITAL = C A – CL**

**= 99 -39**

**= 60**

**B) GROSS WORKING CAPITAL / TOTAL ASSETS \*100**

**99 / 249 \*100**

**= 39.75%**

**C) RETURN ON INVESTMENT = NET INCOME / TOTAL ASSETS \*100**

**= 28 / 249 \*100**

**= 11.24%**

**Question No: 44 ( Marks: 10 )**

Earnings before interest and taxes (EBIT) of Firm is Rs.1000 and Corporate Tax Rate,  $T_c$  is 30%

- a. If the Firm is 100% Equity (or Un-Levered) and  $r_E = 30\%$  then what is the

**WACCU of Un-levered Firm?**

$$\text{EQUITY} = \text{EBIT} / r_E$$

$$= 1000 / 30\%$$

$$= 3333.33$$

**EBIT – TAX**

$$1000 * 30\% = 300$$

$$1000 - 300 = 700 \text{ EAT}$$

$$\text{EAT} / \text{EQUITY} * 100$$

$$700 / 3333 * 100 = 21\% \text{ WACC}$$

- b. If the Firm takes Rs.1000 Debt at 10% Interest or Mark-up then what is the

WACCL of Levered Firm? (There is no change in return in equity)

$$1000 * .10 \text{ INTEREST} = 100 \text{ INTEREST BEFORE TAX COST OF DEBT}$$

$$100 * .30 \text{ TAX} = 30$$

$$100 - 30 = 70 \text{ BEFORE TAX COST OF DEBT}$$

$$\text{AFTER TAX COST OF DEBT} = 70/1000 * 100$$

$$\text{WACC} = 7\%$$

**Question No: 45 ( Marks: 10 )**

If the capital-asset pricing model approach is appropriate, compute the required rate of return for each of the following stocks: Assume a risk-free rate of **.09 (9%)** and an expected return for the market portfolio of **.12 (12%)**

Stock	A	B	C	D	E
Beta	2.0	1.5	1.0	0.7	0.2

$$r = RF + b (rm - RF) \quad \text{or} \quad r = RF + b (rm - RF)$$

$$\begin{aligned} \text{Stock A} &= .09 + 2(.12 - .09) \\ &= .09 + 2(0.03) \\ &= .09 + 0.06 \\ &= 0.15 \text{ or } 15\% \end{aligned}$$

$$\begin{aligned} \text{stock B} &= .09 + 1.5(.12 - .09) \\ &= 0.135 \text{ or } 13.5\% \end{aligned}$$

$$\begin{aligned} \text{Stock C} &= .09 + 1(.12 - .09) \\ &= 0.12 \text{ or } 12\% \end{aligned}$$

$$\begin{aligned} \text{Stock D} &= .09 + .7(.12 - .09) \\ &= 0.111 \text{ or } 11.1\% \end{aligned}$$

$$\begin{aligned} \text{Stock E} &= .09 + .2(.12 - .09) \\ &= 0.096 \text{ or } 9.6\% \end{aligned}$$