

MIDTERM EXAMINATION
Spring 2010
FIN622- Corporate Finance (Session – 3)

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

Which of the following is a transaction of a primary financial market?

► **Initial Public Offering -**

The methods by which the primary market transactions carried out are -

1. Purchasing Initial Public Offer

2. Purchasing Preferential Issue

3. Purchasing Rights Issue

► Buying Mutual Funds Certificates

► Selling old shares

► Buying Bonds issued in previous years

Question No: 2 - - Please choose one

Last year ABC Company had a 9.00% net profit margin based on Rs.22,000,000 in sales and Rs.15,000,000 of total assets. During the coming year, the president has set a goal of attaining a 14% return on total assets. How much must firm sales equal, other things being the same, for the goal to be achieved?

► **Rs.23,333,333 -**

Net income = 22000000 * 9% = 1980000

Return on total assets = net income / total assets

= 1980000 / 15000000

= 0.132

= 23333333 / 1500000 = 1.4

= 15000000 * 0.14 = 2100000

= 2100000 * 100 / 9

Sales = 23,333,333

► Rs.22,000,000

► Rs.26,722,967

► Rs.25,603,667

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

If you want to earn 8 percent, approximately how much should you pay for a security which matures in one year at Rs. 1,000?

► Rs. 1,080

► Rs. 940

► Rs. 920

► **Rs. 926 -**

Fv = pv (1+i) ^n

1000 = (1+0.08) ^1

PV = 1000 / 1.08

= 925.9 = 926

Question No: 4 - - Please choose one

Which of the following statements describes the term structure of interest rates?

► Term structure of interest rates refers to the relationship between yield and rating, for securities with the same maturity.

► Term structure of interest rates refers to the relationship between yield and marketability, for securities with the same tax status.

► **Term structure of interest rates refers to the relationship between yield and maturity, for the same security class. -**

http://www.pimco.com/LeftNav/Bond+Basics/2006/Yield_Curve_Basics.htm

A yield curve depicts yield differences, or yield spreads, that are due solely to differences in maturity. It therefore conveys the overall relationship that prevails at a given time in the marketplace between bond interest rates and maturities. This relationship between yields and maturities is known as the term structure of interest rates.

► Term structure of interest rates refers to the relationship between yield and risk, for securities with the same maturity.

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

A Company's common stock is currently selling at Rs.3.00 per share, its quarterly dividend is Rs.0.07, and the stock is expected to rise to Rs.3.30 in a year. What is its expected rate of return?

► 9.3%

► **19.3% -**

$3.30 - 3.00 = 0.30$

$0.07 * 4 = 0.28 + 0.30 = 0.58$

$58 / 3 = 0.1933 * 100 = 19.33\%$

► 10.0%

► 11.0%

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

For a firm with a Degree of Operating Leverage of 3.5, an increase in sales of 6% will:

► Increase pre-tax profits by 3.5%

► Decrease pre-tax profits by 3.5%.

► **Increase pre-tax profits by 21.0%. -**

$6 * 3.5 = 21\%$

► Increase pre-tax profits by 1.71%.

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

Which of the following best illustrates the problem imposed by capital rationing?

► Accepting projects with the highest NPVs first

► Accepting projects with the highest IRRs first

► **By passing projects that have positive NPVs -**

► By passing projects that have positive IRRs

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

Which of the following is determined by variance of an investment's returns?

► Volatility of the rates of return.

► Probability of a negative return.

► Historic return over long periods.

► **Average value of the investment. -**

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The variance essentially measures the average squared difference between the actual returns and the average return.

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

Which of the following conditions, if exist, will make the diversification of stocks more effective?

► Securities contained in a portfolio are positively correlated

► **Securities contained in a portfolio are negatively correlated -**

Diversification

An investor can reduce portfolio risk simply by holding instruments which are not perfectly correlated.

- ▶ Securities contained in a portfolio have high market values
- ▶ Securities contained in a portfolio have low market values

Question No: 10 - - Please choose one

Suppose a stock is selling today for Rs.35 per share. At the end of the year, it pays a dividend of Rs.2.00 per share and sells for Rs.39.00. What is the dividend yield on this stock?

- ▶ 2%
- ▶ 3%
- ▶ 4%
- ▶ **5% -**

Dividend yield = Annual dividends per share / price per share
= 2 / 35 = 0.057 = 5%

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

Which of the following statements applies to Security Market Line (SML)?

- ▶ Security Market Line (SML) shows the relationship between expected rate of return and required rate of return of a security.
- ▶ Security Market Line (SML) shows the relationship between Beta and market value of a security.
- ▶ **Security Market Line (SML) shows the relationship between required rate of return and beta coefficient of a security. -**

Page 52 Securities Market Line

The relationship between Beta & required return is plotted on the securities market line (SML) which shows expected return as a function of β . The intercept is the risk-free rate available for the market,

- ▶ Security Market Line (SML) shows the relationship between Market value and face value of a security.

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

Which of the following is known as market portfolio?

- ▶ A portfolio consists of all risk free securities available in the market
- ▶ A portfolio consists of securities of the same industry
- ▶ A portfolio consists of all aggressive securities available in the market
- ▶ **A portfolio consists of all securities available in the market -**

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

A firm had an interest expense of Rs.400,000 on its outstanding debt during the financial year 2006-2007. If the firm marginal tax rate is 40%, what was the total tax savings of the firm during the period 2006-2007?

- ▶ Rs.150, 000
- ▶ **Rs.160, 000 -**
- 400,000 *40% = 160,000**
- ▶ Rs.170, 000
- ▶ Rs.180, 000

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

A Pure Play method of selecting a discount rate is most suitable in which of the following situations?

- ▶ When the intended investment project has a Non-conventional stream of cash flows
- ▶ When the intended investment project is a replacement project
- ▶ **When the intended investment project belongs to industry other than the firms operating in -**
- ▶ When the intended investment project has a conventional stream of cash flows

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

Which of the following statements is TRUE regarding an Un-levered firm?

- ▶ Its Return on Equity is equal to Return on Assets
- ▶ **Its Return on Equity is equal to Return on Investment -**
- ▶ Its Return on Equity is equal to Return on Sales
- ▶ Its Return on Equity is equal to Return on Non-fixed Assets

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

Which of the following is the principal advantage of high debt financing?

- ▶ **Tax savings -**
- ▶ Low Bankruptcy costs
- ▶ Minimum financial risk
- ▶ Low financial leverage

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

Which of the following is the main objective of a Residual Dividend Policy?

- ▶ **To use internal resources for investment in projects and business operations -**

- ▶ To pay a fixed amount of Dividend to shareholders of the firm
- ▶ To maintain a constant payout ratio
- ▶ To stabilize Dividend per share

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

Which of the following methods would be most suitable for calculating the return on stocks of a non-listed company?

- ▶ **Dividend Growth Model -**
- ▶ Capital Asset Pricing Model
- ▶ Security Market Line
- ▶ Characteristics Line

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

What will be the effect of reduction in the cost of capital on the accounting breakeven level of revenues?

- ▶ It raises the break-even level.
- ▶ It reduces the break-even level.
- ▶ **It has no effect on the break-even level. -**
- ▶ This cannot be determined without knowing the length of the investment horizon.

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

Which of the following are the primary sources of capital to the firm?

- ▶ **Net income, Retained earnings and Bank loans -**
- ▶ Bonds, Preferred stock and Common stock
- ▶ Operating profits, extraordinary gains and Dividends
- ▶ Amortization cash flow, Net income and Retained earnings

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

Suppose you invested Rs. 8,000 in a savings account paying 5 percent interest a year, compounded annually. How much amount your account will have at the end the end of four years?

- ▶ Rs.10, 208
- ▶ **Rs.9, 728 -**

By applying formula of future value

- ▶ Rs.10, 880
- ▶ Rs.9, 624

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

Which of the following refers to an analysis of financial statements where all balance sheet or income statement figures for a base year equal 100.0 and financial statement items for subsequent years are expressed as percentages of the base year values?

- ▶ **Common-size analysis -**

Page 6 **Base Year Analysis:** Common Size analysis is also known as Vertical Analysis. Base year analysis is another tool of comparing performance and is also known as Horizontal Analysis In this case, performance is compared over, say, five years period. The earliest year or the first year is taken as base year

and every line item in the balance sheet of base year is taken as 100%. In the subsequent years amounts of every line item are expressed as %age of base year amount.

- ▶ Ratio analysis
- ▶ Index analysis
- ▶ Technical analysis

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

Which of the following is more appropriate to use while comparing investment alternatives with different compounding periods?

- ▶ Quoted Interest Rate
- ▶ Annual Percentage Rate
- ▶ **Effective Annual Interest Rate -**

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Effective Annual Rate – EAR

The Effective Annual Rate (EAR) is the interest rate that is annualized using **compound interest**. The EAR is the annualized equivalent of **interest with shorter**

compounding periods.

It can be calculated from the following formula:

$$\text{EAR} = (1 + i/n)^n - 1$$

- ▶ Nominal Interest Rate

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

ABC Company will pay a dividend of Rs.2.40 per share at the end of this year. Its dividend yield is 8%. At what price is the stock selling?

- ▶ 40
- ▶ 35
- ▶ **30 -**

$$\text{Selling price} = 2.40 / 0.08 = 30$$

- ▶ 25

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

Which one of the following costs should be ignored while evaluating the financial viability of a project?

- ▶ Initial cost
- ▶ Equipment cost
- ▶ Cost of capital
- ▶ **Sunk cost -**

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

In which of the following situations a project is acceptable?

- ▶ When a project has conventional cash flows patterns
- ▶ When a project has a non-conventional cash flow pattern
- ▶ When a project has a discounted rate higher than the inflation rate
- ▶ **When a project has a positive net present value -**

Question No: 27 - - Please choose one

Which of the following capital budgeting methods states the project return as a percentage?

- ▶ Payback period
- ▶ Net present value
- ▶ **Internal Rate of Return -**

Internal Rate of Return is always quoted in terms of percentage, which makes it comparable to the other market interest rates or the inflation rate

- ▶ None of the given options

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

What is the Net Present Value (NPV) of a project that costs Rs.100, 000 and returns Rs.45, 000 annually for three years if the opportunity cost of capital is 14%?

- ▶ Rs.16, 100.00
- ▶ **Rs.35, 000.00**

► Rs.3, 397.57 - Doubt

► Rs.4, 473.44

Question No: 29 (Marks: 3)

How stable dividend policy could increase the marketability of a firm's shares?

Question No: 30 (Marks: 3)

Differentiate between the single period capital rationing and multi-period capital rationing.

Answer

Single period capital rationing

It is a situation where the company has limited amounts of funds in one investment period only. After that period, the company can access funds from various sources, e.g. issuing shares, borrowing from banks or issuing bonds.

Multi-period capital rationing

It occurs where the company has limited amounts of funds for a longer duration of time. The capital constraints extend beyond one investment period. If we assume that it's possible to undertake fractional projects then the problem can be formulated using linear programming. If the projects are indivisible, however, then integer programming should be used.

Question No: 31 (Marks: 5)

In the year ending January 2008, Wal-Mart paid out Rs.1,326 million as debt interest. How much more tax would Wal-Mart have paid if the firm had been entirely financed by equity? What would be the present value of Wal-Mart's interest tax shield if the company planned to keep its borrowing permanently at the 2008 level? Assume an interest rate of 8% and a corporate tax rate of 35%.

Question No: 32 (Marks: 5)

Suppose you are a capital budgeting manager of a company. For current year you have a total capital budget of Rs.6,000,000. Following are given the projects available for investment:

	A	B	C		
Projects Initial Investment(millions)	8	3	3		
Annual Cash flows millions)	3	1.5	1		
Project Life (years)	5	3	6		
Discount Rates	10%	8%	12%		

Requirement:-

Which project(s) should be selected for investment with in the given budget?

