## College of Applied Business (CAB)

Sent-up Examination, February 2015

## BBA / Third Semester / FIN 201: Business Finance

Candidates are required to give their answers in their own words as far as practicable.

## Section A

## Time 20 minutes

## Brief answer questions:

$[10 \times 1=10]$
Indicate whether the following statements are 'True' or 'False'. Support your answer with reasons.

1. Wealth maximization is long - term goal of firm.
2. Financial market deals with transaction of physical assets.
3. We can completely eliminate the risks of the portfolio of two stocks with perfect positive correlation coefficient.
4. Default risk is assumed to be absent in treasury bills.
5. Perpetuity is an annuity in which payments go on the stated future date.
6. The present value of annuity due factor of Re. 1 at a discount rate of 15 percent for 10 years is 5.0188 .
7. Project with negative net present value maximizes shareholders wealth.
8. Bonds with higher rate of return than coupon rate is par bond.
9. The expected rate of return on a stock is the sum of interest rate and capital gain yield.
10. Wealth maximization considers the time value of money of the cash flows.

## Section B

Time 30 minutes
Short answer questions: (ANY TWO)
11.
a. Price maximization goal of the firm is superior to profit maximization. Justify.
b. The ABC Company had a quick ratio of 1.4 , a current ratio of 3.0 , and an inventory turnover of 6 times, total current assets of Rs. 810,000, and cash and marketable securities of Rs.120, 000 in 2014. What were ABC's annual sales and it's DSO for that year? Assume there are 365 days in a year.
12. Stock A and B have the following probability distribution of possible returns:

| Probability | A (\%) | B (\%) |
| :---: | :---: | :---: |
| 0.1 | -15 | -20 |
| 0.2 | 0 | 10 |
| 0.4 | 5 | 20 |
| 0.2 | 10 | 30 |
| 0.1 | 25 | 50 |

a. Calculate the expected return for each stock.
b. Calculate the standard deviation of the returns of for each stock.
c. Assume that you are creating a portfolio comprising equal investment in each stock, determine the expected return and risk of the portfolio.

## OR

Investors require a 20 percent per return on the stock of N company. Yesterday N company paid a Rs. 2 dividend per share. The dividend is expected to grow 30 percent per year for the next 4 years and at an 8 percent per year thereafter. Determine the price of stock today and price of stock 10 years from today.

## Section C

Comprehensive answer questions:

Time 80 minutes
$[2 \times 10=20]$
13.
a. A 10- year, 12 percent semiannual coupon bond, with a par value of Rs. 1,000, may be called in 4 years at a call price of Rs. 1,060. The bond sells for Rs. 1,100. (Assume the bond has just been issued.)
i. What is the bond's yield to maturity?
ii. What is the bond's yield to call?
b. It is now January 1, 2009. Today you will deposit Rs.2, 000 into a savings account that pays $8 \%$.
i. If the bank compounds interest annually, how much will you have in your account on January 1, 2012?
ii. What will your January 1, 2012, balance be if the bank uses quarterly compounding?
iii. Suppose you deposit Rs.2, 000 in three payments of Rs. 666.67 each on January 1 of 2010, 2011, and 2012. How much will you have in your account on January 1, 2012, based on $8 \%$ annual compounding?
iv. Suppose you deposit three equal payments into your account on January 1 of 2010, 2011, and 2012. Assuming an $8 \%$ interest rate, how large must your payments be to have the same ending balance as in part i ?
14. Following are the cash flow of two projects:

| Year | Cash Flow(A) | Cash flow (B) |
| :---: | ---: | ---: |
| 0 | $(1,70,000)$ | $(1,70,000)$ |
| 1 | 25,000 | 60,000 |
| 2 | $(10,000)$ | 60,000 |
| 3 | $2,50,000$ | 60,000 |
| 4 | $1,00,000$ | 60,000 |

a. Calculate NPV and IRR of each project assuming that the required rate of return is $12 \%$.
b. Which project will you select on the basis of results obtained from part (a), if the projects are mutually exclusive? Why?
c. If the projects are independent, would your decision be changed? Why?

