VPM's DR VN BRIMS, Thane Programme: PGDM (2015-16) Fifth Trimester Examination January 2016

| Subject | Behavioral Finance | | |
|----------------------------|--------------------|----------|------------|
| Roll No. | | Marks | 60 Marks |
| Total No. of Questions | 7 | Duration | 3 Hours |
| Total No. of printed pages | 3 | Date | 20.01.2016 |

Note: Q1 is compulsory and solve any FOUR from the remaining SIX questions.

Q1) 20 Marks (Compulsory)

1A) You are considering the purchase of your first house. You are evaluating two houses that are almost identical. Your best deal on House A is \$220,000 and has a brand new professionally installed home theater (with an approximate value of \$7000). House B, identical except for the home theater system will cost \$213,000. Assume that the difference in home prices is not enough to impact your ability to finance the purchase. Which house would you prefer?

Home A (with home theater system) House B (no home theater system)

1B) One year ago, you purchased a new home valued at \$213,000. Today you notice an advertisement for a professionally installed home theater system for \$7,000. You do not have the cash on hand, but can arrange financing to purchase the system. Do you purchase the home.

Attempt Any FOUR from the Remaining SIX Questions

Q2) Any two from (a) or (b) or (c) — (5x2) = 10 Marks

a) There are only two stocks and risk free assets in the market, the stocks are high tech cor portion and low tech corporation.

The stocks are High Tech Corporation and Low -Tech Corporation.

| | Expected returns | Standard deviation of returns |
|-------------------------------|------------------|-------------------------------|
| High Tech – HT | 15% | 30% |
| Low Tech - LT | 8% | 10% |
| Risk free assets | 4% | 0% |
| Co relation between HT and LT | - 0.10 | |
| Co relation between HT and RF | 0 | |
| Co relation between LT and RF | 0 | |

Choose a optimal portfolio which will generate return in future.

- **b)** You have the choice to receive a guaranteed \$240 OR participate in a game of chance. In the game of chance, you have a 25% chance of receiving \$1000 and a 75% chance of receiving nothing. What will you choose and why ?
 - A) Take the guaranteed \$240
 - B) Take the game of chance (25% chance of \$1000 or 75% chance of \$0)
- c) Why do you invest in your employer or know brands ? Justify your answer.

Q3) Any two from (a) or (b) or (c) — (5x2) = 10 Marks

- a) Rank the following stocks based on which you expect to generate the highest returns over the next three years (1 is the highest expected return and 9 the lowest)
 Exxon Mobil _____ Google _____ Wal-Mart ____ Apple ____ Toyota Motors _____ Ford Motors _____ Baidu ____ Citigroup _____ Goldman Sachs_____ Tata motors
- **b)** Risk Measure for NYSE composite index and selected stocks.

| Stocks | Industry | Average return- 2002-2006 | Standard deviation of return | Beta |
|----------------------|-----------------------------|------------------------------|------------------------------------|------|
| NYSE Index | Broad based index of stocks | 9.02% | 11.92% | 1.00 |
| US Treasury Bills | Measure of risk free rate | 1.45% | 5.02% | 0 |
| ABN Ambro Holding | Foreign Bank | 22.04% | 29.94% | 1.40 |
| CytRx Corp | Drugs | 35.58% | 105.03% | 0.55 |
| JDSiphase | Electronic | -24.71% | 77.84% | 1.45 |
| YUM! Brands | Restaurant | 18.16% | 21.04% | 0.55 |

Base on CAPM assumption in behavioral Finance and investors expectation analyze the above table in detail.

c) why do we see a huge selling of stocks during the month of January, give reasons.

Q4) Any two from (a) or (b) or (c) — (5x2) = 10 Marks

- a) Imagine that you have just won \$1500 on a coin flip. By winning the money, you have the opportunity to place a second bet. We will flip a fair coin. If the coin comes up heads you will win Rs 500 and if it comes up tails you will lose rs 500. Do you take part in the second bet or do you stop after winning the Rs1500 ?
 - A) Take second bet
 - B) Don't take second bet

Based on your answer, analyze your behavior and what biases is reflected in your decision.

- **b)** How do stock market scams impact the stock markets ? What are the after effects on the investors behavior.
- c) differntiate difference between traditional finance and behavioral finance?

Q5) Any two from (a) or (b) or (c) — (5x2) = 10 Marks

a) Explain what is framing biases and co relate to the quiz given below.
 1) In addition to whatever you own, you have been given \$1,000. You are now asked to choose between
 A) A sure gain of \$500
 B) A 50% change to gain \$1,000 and a 50% chance to gain nothing.

b) Dewan Housing Finance Corporation: For the past 25 years, the company has been specialising in providing home loans to lower and middle income families. It has been scaling up rapidly and has expanded its balance sheet by four times over the last five years.

The gross non-performing assets are less than 0.75% of the total loans. It also has a conservative provisioning coverage ratio of over 100%. Provisioning coverage ratio is the ratio of provisioning to gross non-performing assets.

"Dewan Housing's return on equity, or RoE, has been 20% a year for the last 10 years. Its earnings are also not volatile, with lowest RoE in the last 10 years being 15.2% (in 2006-07). For a company that has a huge market to serve, strong moats, long operating history and rising business profile, it is available at a very low valuation of 0.8 times book value and around five times 2013-14 earnings," says Gokul Raj P, portfolio manager, HBJ Capital.

After reading the above example do you you think it is wise to look at only Price to book value ratio for finding a right investment.

c) What other parameters can be used to find the right stock for investing.

Q6) Any two from (a) or (b) or (c) — (5x2) = 10 Marks

- a) You are in the market for a new flat-screen HDTV and are considering one of the following two models. Assume that your income is enough that purchasing any of these TVs is not going to cause you to eat Ramen noodles for the next two months, but that this is still considered a significant purchase. A) This HDTV has a 45" screen and comes with a 3-year warranty. A popular review magazine gives it an overall score of 90 out of 100. The cost is \$1299. B) This HDTV has a 51" screen and comes with a 3-year warranty. A popular review magazine gives it an overall score of 93 out of 100. The cost is \$2399. Which TV are you most likely to purchase? A B
- **b)** which bias is reflected in the above scenario ? Has this bias effected your decision in your personal life.

c) explain Dot Com and Housing stock market bubble in detail.

Q7) Any two from (a) or (b) or (c) — (5x2) = 10 Marks

- a) What are biases, how does it impact your investing decisions.
- **b)** Explain technical anomalies in detail ?
- c) what is forensic accounting ?