**MIDTERM EXAM –**

**SECTION I – Stock Markets and Valuation**

1. Buying/Selling, Margin Loans and Short Selling
   1. I buy 100 shares of IBM at $100 and sold it for $120 – 20/200=20%
   2. I buy 10 shares of IBM at $100 n 50% margin loan at 10.0% and sold for $120 (120-50-5-50) = 15 = 15/50 = 30%
   3. I buy 10 shares of IBM at $100 in 50% margin loan at 10%, received a dividend of $4 and sold at 120 ……. $120-50-5+4-50 = 19 .. 19/50 = 38%
   4. I borrowed 100 shares of XYX at current stock price of $100 and bough at $80 100-80 / 100 = 20% short investment
2. Valuation methods
   1. Using the Stock Price EV = EQ + D – C , EQ = SO x SP
   2. Intrinsic Value (P + D) / CAPM
   3. DDM Div (1+g) / (CAPM – g)
   4. EBITDA Multiples EV = EBITDA Multiple x EBITDA
   5. DCF (Basic Concepts of PV, FV of Cash Flows, Discount Rate) – Equity CFs, TV and Debt (exit year) and discount back the future cash flows using Equity Return to get the Equity Value / Shares outstanding = Stock Price

**SECTION II – Bond Analysis & Valuation**

1. Bond Price and Invoice Price (Bond Price + Accrued Interest = Invoice Price)
2. YTM, YTC, YTW and Current Yield =yield (SD,MD,CR,P,R,F)
3. Price, Duration and Convexity (Table for calculation pf Price, Duration and convexity)

**SECTION III – Option Analysis & Valuation**

1. Basic Options (Buy/Sell of Calls, Puts and Straddles) – PAYOFFS, PROFIT, BE
2. Vertical Spreads– PAYOFFS, PROFIT
   1. Bull / Bear and Butterflies
3. Binomial Option Pricing Model
   1. Single Period (Leverage Method and Probability Method)
   2. Two Periods w and w/o Dividends
4. Black-Scholes for Calls/Puts and Call-Put Parity