**Formulas**

Holding Period Rate of Return HPR = ((FV+DIV)/PV-1)\*100

Annual Percentage Rate ARR = (FV/AP)\*100

Effective Annual Rate EAR = (((FV/PV)^(12/n))-1)\*100

Arithmetic Average (Same Time line of investment) AA = Int of Stk 1 + Int of Stk 2 + Int of Stk3/3

Geometric Average (Across timeline of Investments) GA = (((1+Intstk1)(1+Intstk2)^(1/2)-1)\*100)

After Tax Yield = Int on Bond/(1-tax rate)

Inflation Adjusted Rate of Return or Real Rate of Return = (((Nominalvalue/Inflationadjvalue)-1)\*100)

or

((1+Nominalrate)/(1+Inflationrate)-1)\*100

or

Nominalrate-Inflationrate

Nominal Rate of Return = (1+Realrate)\*(1+inflationrate)-1

Tme Value of Money FV = PV\*(1+(i/n))^(n\*t) PV = FV/(1+(i/n)^(n\*t)

Expected Rate of Return = Probability\*Possible Return+Prob.\*Pos.Return

Price Weighted Index = Total Price of all Securitites/ no. of Securities

Weight of Security A = Price of A \* Units of A in Index/ Total Market Value of all Securities in the Index

Return of Index = (Closing Index - Opening Index) / Opening Index

Margin Call Price MCP = Price\*((1-Initialmargin)/(1-Maintenancemargin))

Equity = MV-Debt

Margin = (MV-Debt)/MV or Equity/Debt

Percentage Loss = (Price-ReducedPrice)/(margin\*Price)

Dividend Yield DY = Dividend / Price

Dividend Payout DP = Dividend/ Earnings per share

Retention Ratio RR = 1-Payout Ratio

Intrinsic Value = Divided / Discount Rate - Dividend Growth Rate

Intrinsic Value = Dividend at Year 3/(Requied rate of Return - Contant Perpetuity Dividend Growth rate

RRR using CAPM Model = Risk-free rate + (beta\*(market return-risk-free rate)) Risk-free rate + (market Risk premium\*Beta)

Market Rate of return MRR = (Risk free return - Market Risk Premium)\* Beta or EPS Growth in 3 years-Market Risk Premium or Risk-free rate + (market Risk premium\*Beta)

RRR using Divided Model = (Dividend Expected Payment/Stock price)+Dividend Growth Rate

Expected Price of Stock = (EPS\*(DivPayout)(1+EPSGrowthin3 years)^3(1+EPSGrowthrateperpetuity)/(RRREPSGrowthrateperpetuity))

Return on Equity (ROE) = Net Income / Shareholders Equity

Expected Price of Stock = (EPS\*(DivPayout)(1+EPSGrowthin3 years)^3(1+EPSGrowthrateperpetuity)/(RRR-EPSGrowthrateperpetuity))

Dividend Per Share = Dividend Payout \* Earnings per share

Intrinsic Value = Dividend Per Share / (RRR - Growth Rate)