**MIDTERM EXAM I (60 POINTS)**

**SECTION 1: TVM (10 POINTS)**

**There will be 5 questions on excel on TVM that you need to use excel format formulas to calculate including FV, PV, Rate, Time, PMT**



**You invested 10,000 at 5% for 10 years. Calculate the future of the investment**

**SECTION II – ALLOCATION & EFFICIENT FRONTIERS (16 POINTS)**

There will be one question that you need to allocate your stocks and bonds and calculate the Correlation:



There will be one question from the three formats below (A,B,C) that you need to calculate Average Rate of Return and Standard Deviation:

**SECTION III – AVG & STDEV, BETA AND CORRELATION (12 POINTS)**



-=AVERAGE( Range)

=STDEV (Range)

=SLOPE(Array 1, Array 2)

=CORREL(Array 1, Array2)

**SECTION IV – PORTFOLIO MANAGEMENT (22 POOINTS)**

There will be one question on portfolio management to calculate portfolio returns, standard deviation, CAPM, Sharpe Ratio, Alpha and Treynor coefficient.

Return of Portfolio = Ws. Ers + Wb. Erb

Standard Dev Port.= Sqrt ( Ws.SDs)^2 + (Wb.SDb)^2 + 2 (Ws.SDs.Wb.SDb). Cor



