**Project**

1. Select 3 securities from Tadawel (describe the companies)

a)- Calculate for each of the securities and the Tadawel index:

- The expected return

- The standard deviation

- The covariance between the different securities

- The correlation

- Beta of securities

b) Analyze the result

b) Calculate the expected return and risk of the different following portfolios :

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **P1** | **P2** | **P3** | **P4** |
| % en A | 50 | 50 |  | 1/3 |
| % en B | 50 |  | 50 | 1/3 |
| % en C |  | 50 | 50 | 1/3 |

c) Calculate the diversification effect (in %) and analyses the result.

d) Determine the minimum variance portfolio

e ) Determine the beta and the expected return of the minimum variance portfolio and make your proper interpretation.

f) Make the overall interpretation

2) For the same selected period, find the price of the gold and the oil

a) Determine the betas of the different securities A, B & C

b) Determine the new expected return

c) compare the result with the above.