Question one

On Monday morning you sell one June T-bond futures contract at 97:27 or for $97843.75 . The contracts face value is $100000. The initial margin requirement is $2700 and the maintenance margin requirement is $2000 per contract. Use the following data to answer the questions.

|  |  |
| --- | --- |
| Day | Settle |
| Monday | $97 406.25 |
| Tuesday | $98 000.00 |
| Wednesday | $100 000.00 |

1. What is the balance on your margin account after Mondays close?
2. What is the cumulative rate of return on your investment at close of day on Tuesday?
3. On which day will you get a margin call
4. What will be the cumulative rate of return on your investment after Wednesday?

Question two

Based on current dividend yields and expected capital gains, the expected rate of return on portfolios A: 11% and B: 12%. Beta A: 0.8 and B: 1,5. T-bill rate is currently 6% while the expected rate of return of the JSE all share index ( ALSI) is 12%. The standard deviation of A: 10% annually and B: 31% and Index: 20%.

1. If you currently hold a market index portfolio, would you choose to add either of these portfolios to your holdings? Explain.
2. If instead you could invest only in bills and one of these portfolios, which would you choose?