
LTU/TITE

BM20A3401 and BJ70A0701-V (Teollisuus-ja ympäristöanalytiikka välikoe) 3/Design of Experiments)

Examination 06.05.2011 / H.Haario

1. Describe the main motive of Design of Experiments.
2. A) How can you estimate the level of random error in your experiments B) How can you see that changes between experiment responses are systematic, not random noise?
3. Describe the concepts A) coded units B) R² value
4. What are the risks if you choose the experimental region (min/max values of factors a) too small b) too big ? How can you see that the min/max values of your design are properly chosen?
5. Give the 2^N experimental plan of 3 factors, in coded units.

No books allowed - answers in English or Finnish