

Exam 20.12.2023, 09.00 – 13.00

The students can keep the questions.

You can at a maximum get 50 points. You need at least 25 points to pass the exam.

QUESTIONS

- 1) When you choose a quantitative method for analysis (for example a t-test, ANOVA etc), what commands your choice? (Which are the questions you need to answer in choosing the right method) (5 p)
- 2) You did in the course 23130 Quantitative Research Methods for Business Studies a teamwork based on a quantitative study. You designed a questionnaire, collected data, and made an analysis. What did you learn? Explain,
 - a) What do you think worked well with your questionnaire and what would you do differently and why (the why question is very important to answer) (5 p)
 - b) What do you think worked well with your data sampling method and what would you do differently and why (if you would do a corresponding study)? (5 p)
 - c) In your data analysis and presentation of the findings, what are you satisfied with and why? What could you (the team) have done differently, and why? (5 p)
- 3) Make an interpretation of the following test results. A product is sold on three (3) markets, Market A, Market B and Market C. You are interested to test if there is PRICE differences.
 - a) Write down the null-hypothesis (H_0) and the alternative hypothesis (H_1) (2 p)
 - b) For accepting or rejecting the null-hypothesis, what do you do? (what do you compare, and what is the “rule of thumb” for accepting or rejecting a null-hypothesis (3 p)
 - c) Look at the results presented in both tables, what are the results – your conclusion (5 p)

	N	PRICE Mean	Std. Deviation	Minimum	Maximum
Market A	4	13,0250	,59090	12,20	13,50
Market B	4	12,0000	,70711	11,00	12,50
Market C	4	13,1250	,09574	13,00	13,20
Total	12	12,7167	,71837	11,00	13,50

ANOVA

PRICE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3,102	2	1,551	5,420	,029
Within Groups	2,575	9	,286		
Total	5,677	11			

- 4) Assume that you are doing a multiple regression analysis.
- When can you be satisfied with your model, which a) criteria are you looking at and b) what do they (criteria) measure? (10 p)
- 5) Explain the following:
- A metric variable (compared to a non-metric) (2 p)
 - Multi-collinearity (in regression analysis) (2 p)
 - Communality (in factor analysis) (2 p)
 - Eigen value (in factor analysis) (2 p)
 - Factor (in factor analysis) (2 p)