
Quality Statistics Analyst

2017

IQCS

First written test

Field	Quality area	Qualification	Quality Statistics analyst	Valid date	2017. 6. 1
Exam type	Multiple choice	No. of Ques.	40	Exam hour	90 minutes.
Title	Sub title	Detail		No. of Ques	Distribution
Industrial statistics	1. Probability and probability distribution	<ul style="list-style-type: none"> • Population and samples • Probability theory • Probability distribution 		10	25%
	2. Examination and estimation	<ul style="list-style-type: none"> • Basic theories of examination and estimation • Examination and estimation of indiscrete value • Examination and estimation of coefficient value • Conformity examination 			
	3. Correlation and regression analysis	<ul style="list-style-type: none"> • What is correlation? • Examination and estimation of correlation • Regression analysis 			
	4. Quality management innovation activity	<ul style="list-style-type: none"> • 6 sigma • Quality improving activity • Indiscrete value QC method • Process ability index/ Process performance index 			
Sampling test	1. Summary of test	<ul style="list-style-type: none"> • Definition, objective classification and plan of test 		10	25%
	2. Sampling method and theory	<ul style="list-style-type: none"> • Terms and type of samples 			
	3. QC curves	<ul style="list-style-type: none"> • Characteristics of QC curves and pass rate of rot 			
	4. Indiscrete, enumerated value sampling	<ul style="list-style-type: none"> • Characteristic assurance • Failure rate assurance • KS Q ISO 2859-1, -2, -3 • Order sampling test 			
Control chart (general)	1. Indiscrete value control chart,	<ul style="list-style-type: none"> • Mean, range • Individual data • Median, range median control chart 		5	12.5%
	2. coefficient value control chart,	<ul style="list-style-type: none"> • Nonconformity item number, nonconformity item rate control chart • Nonconformity number and number per unit control chart 			
	3. control chart	<ul style="list-style-type: none"> • Control chart condition judging 			

	judging and Process interpretation,	and process interpretation		
Test planning	1. One way ANOVA, Two way ANOVA	<ul style="list-style-type: none"> • Variances analysis table understanding and analysis 	10	25%
통계분석실무 Statistics Analyst Practice	1. Examination and estimation, Correlation and regression analysis, Process ability index, One way ANOVA, Two way ANOVA	<ul style="list-style-type: none"> • Definitions and characteristics of each technique • Drawing tricks of each technique • Analyzing method • Practice method 	5	12.5%

2nd practical test

Field	Quality area	Qualification	Quality Statistics Analyst	Valid date	2017. 6. 1
Exam type	Short answer	No. of Ques.	10 ~ 20	Exam hour	120 min.
Title	Sub title	Detail		No. of Ques.	Distribution
Industrial statistics	1. Data collection and management method	<ul style="list-style-type: none"> Parameter estimation by statistics Population understanding by sampling 		Depends on percentage	100%
	2. Probability and probability distribution	<ul style="list-style-type: none"> Basic probability calculation Indiscrete value, coefficient value distribution understanding 			
	3. Examination and estimation	<ul style="list-style-type: none"> Average and variances test and estimation Able to estimate and test dispersion Coefficient value examination and estimation 			
	4. Correlation regression analysis	<ul style="list-style-type: none"> Two variances correlation digitization and straight line estimation Able to explain terms that are using at interpret of control chart 			
Control chart	1. Control chart drawing and interpretation	<ul style="list-style-type: none"> Indiscrete value, coefficient value drawing and interpretation Able to explain terms that are using at interpret of control chart 			
Test planning	1. Factorial design	<ul style="list-style-type: none"> ANOVA drawing and interpretation 			
Sampling test Practice	1. Summary of test	<ul style="list-style-type: none"> Able to implement term, type and form of test Able to understand general factors of sampling test 			
	2. Design of sampling test	<ul style="list-style-type: none"> Able to utilize and design sampling test. Understand principle of sampling design and able to design arithmetic way Able to perform enumerated value sampling test Able to perform indiscrete value 			

		sampling test • Able to perform coefficient order sampling test		
General quality management	1. General quality management	• Able to calculate and interpret process ability index • Acquire of basic ability related to 6 sigma	Depends on percentage	100%