



DEFENSE ACQUISITION UNIVERSITY

CMQ 200 - Statistical Sampling

141001

Course Learning/Performance Objectives followed by its enabling learning objectives on separate lines if specified.

1	Given quality assurance scenarios, identify the reasons for employing sampling inspection over screening (100%) inspection.
	Recognize the difference between sampling inspection characteristics and screening (100%) inspection characteristics.
	Recall the main uses of sampling in industry.
	Recognize the importance of random sampling.
	Recognize the difference between the definitions of inspection by attributes and inspection by variables.
2	Given a population and lot formation guidelines, choose a sample that appropriately represents the population.
	Define inspection lot/inspection batch.
	Identify the guidelines for lot formation.
	Recognize characteristics, features, and specification requirements identified as acceptance sampling criteria.
3	Given sampling plans, recognize the common characteristics of sampling plans.
	Recognize the hierarchy between individual sampling plans, sampling schemes, and sampling systems.
	Recognize the relationship between Acceptable Quality Level (AQL), lot size, and sample size.
	Recognize the relationship between consumer's risk and producer's risk.
4	Given a scenario, use simple, systematic, cluster, and stratified sampling methods, solve for random samples.
	Recognize the characteristics of the simple sampling method.
	Identify randomization tools.
	Apply the simple sampling method.
	Recognize the characteristics of the systematic sampling method.
	Apply the systematic sampling method.
	Recognize the characteristics of the cluster sampling method.
	Apply the cluster sampling method.
	Recognize the characteristics of the stratified sampling method.
	Apply the stratified sampling method.
5	Given sampling scenarios, apply the rules for zero-based acceptance sampling systems.
	Recognize attributes of the zero-based acceptance sampling system.
	Choose a sample size for zero-based acceptance sampling systems.
	Identify the accept/reject criteria for zero-based acceptance sampling systems.
	Apply acceptance or non-acceptance rules for zero-based acceptance sampling results.
	Recognize the switching guidelines that are compatible with zero-based acceptance sampling systems
Apply switching guidelines to adjust sampling levels for zero-based acceptance sampling systems.	
6	Given sampling scenarios, apply the rules for ANSI/ASQ Z1.4-2008 sampling systems.
	Recognize attributes of ANSI/ASQ Z1.4-2008 sampling system.
	Choose a sample size for ANSI/ASQ Z1.4-2008 sampling systems.
	Identify accept/reject criteria for ANSI/ASQ Z1.4-2008 sampling systems.
	Apply acceptance or non-acceptance rules based on ANSI/ASQ Z1.4-2008 sampling results.
	Recognize the switching guidelines that are compatible with ANSI/ASQ Z1.4-2008 sampling plans.
Apply switching guidelines to adjust sampling levels for ANSI/ASQ Z1.4-2008 sampling systems.	
7	Given sampling scenarios, apply the rules for the MIL-STD-1916 sampling system.
	Recognize the attributes of the MIL-STD-1916 System.
	Choose a sample size for MIL-STD-1916 sampling systems.
	Identify accept/reject criteria for MIL-STD-1916 sampling systems.
	Apply acceptance or non-acceptance rules based on MIL-STD-1916 sampling results.
	Recognize the switching guidelines that are compatible with MIL-STD-1916 sampling plans.
Apply switching guidelines to adjust sampling levels for MIL-STD-1916 sampling systems.	