

**SCII/00825/2019**  
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**SYSTEM DESIGN AND IMPLEMENTATION**  
**ASSIGNMENT**

**1. Define software quality assurance (SQA)**

Software quality assurance is a means and practice of monitoring the software engineering processes and methods used in a project to ensure proper quality of the software. It may include ensuring conformance to standards or models, such as ISO/IEC 9126, SPICE or CMMI

**2. Describe what is involved in SQA**

SQA encompasses the entire software development process, including requirements engineering, software design, coding, code reviews, source code control, software configuration management, testing, release management and software integration.

**3. Explain SQA attributes**

Correctness  
Reliability  
Adequacy  
Learnability  
Robustness  
Maintainability  
Readability  
Extensibility  
Testability  
Efficiency  
Portability

**4. Describe SQA techniques**

Purpose section

Reference section

Software configuration management section

Problem reporting and corrective action section

Tools, technologies and methodologies section

Code control section

Records: Collection, maintenance and retention section

Testing methodology

## **5. Explain the SQA standards**

ISO 9001 is an internationally recognized quality management system standard, which is a global benchmark for quality management systems. ISO 9001 establishes requirements and recommendations for the design and assessment of a quality management system.