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BCS 3263 SOFTWARE QUALITY ASSURANCE

Chapter One Quality Assurance Basics

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Chapter Description

- Aims
 - Demonstrate understanding of the main concepts, of Software Quality Assurance (SQA)
- Expected Outcomes
 - Inquire a knowledge of main software quality assurance activities, their tasks, work products and their models
- Other related Information
 - Introduces students to the concept of Software Quality Assurance (SQA) including principles, component, process, models, standards and certification of SQA.
- References
 - Mastering software quality assurance : best practices, tools and techniques for software developers / Murali Chemuturi Chemuturi, Murali, J. Ross Pub. QA76.76.Q35 C44 2011



What is Quality ?



Word of Quality
means either
Good or Bad .. Is
that enough ?

Software Quality

“The *degree* to which a set of *inherent characteristics* fulfills *requirements*.” (ISO 9000, 2nd edition, 2000)

“The degree to which a system, component, or process meets specified *requirements*” (Philip Crosby, IEEE)

“The degree to which a system, component, or process meets *customer* or user needs or expectations” (Joseph M. Juran, IEEE).

“Conformity to *user* expectations, conformity to *user* requirements, *customer* satisfaction, reliability, and level of defects present.” (ISO/IEC 20926:2003)



QUALITY ASSURANCE

Industry association or standards body

- Reputation
- protecting from fraud and lawsuits
- addressing consumers concerns

End user of a product

- defect-free functioning
- reliability
- ease of use
- acceptable levels of fault tolerance during use
- safety from injury to people or property.

Provider of services

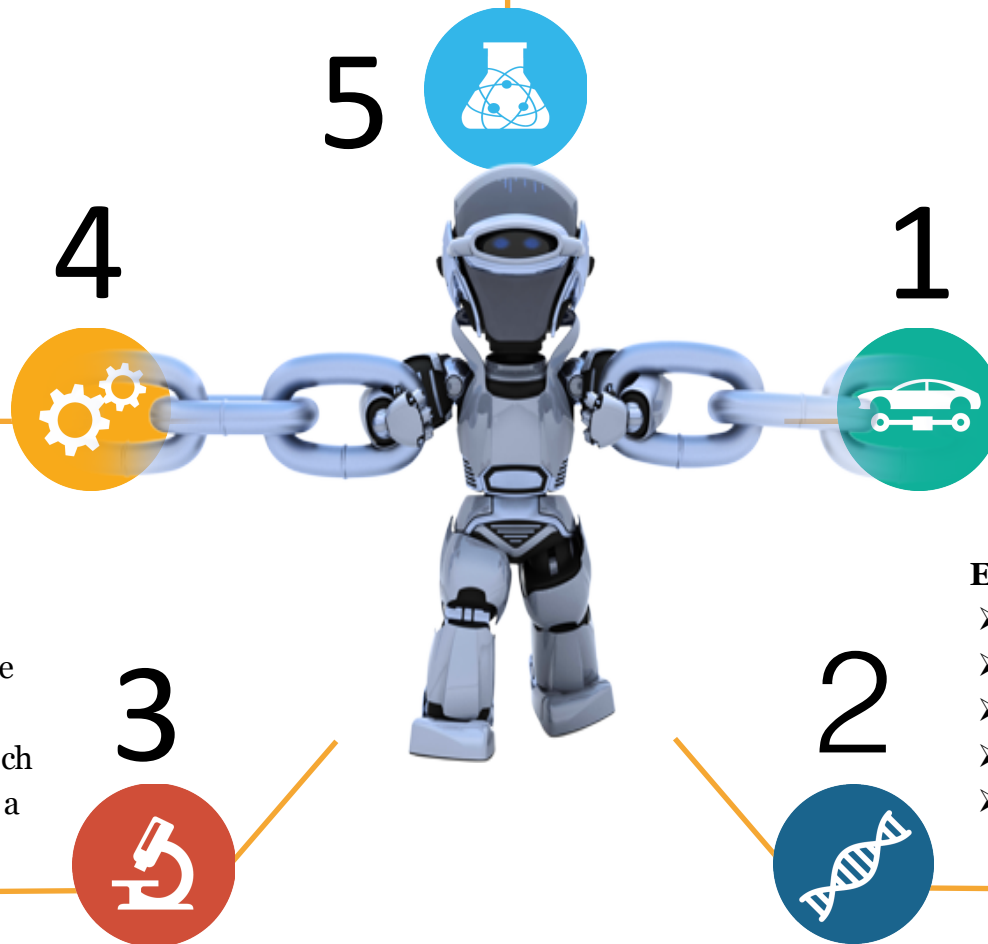
- Deadlines and delivery that conforms to specifications & standards

End user of a service

- reliability of performance
- ease of obtaining service
- expert service
- pleasant service
- protection from consequential damage

Producer of goods

- conformance of the product to specifications, which may be defined by a government body



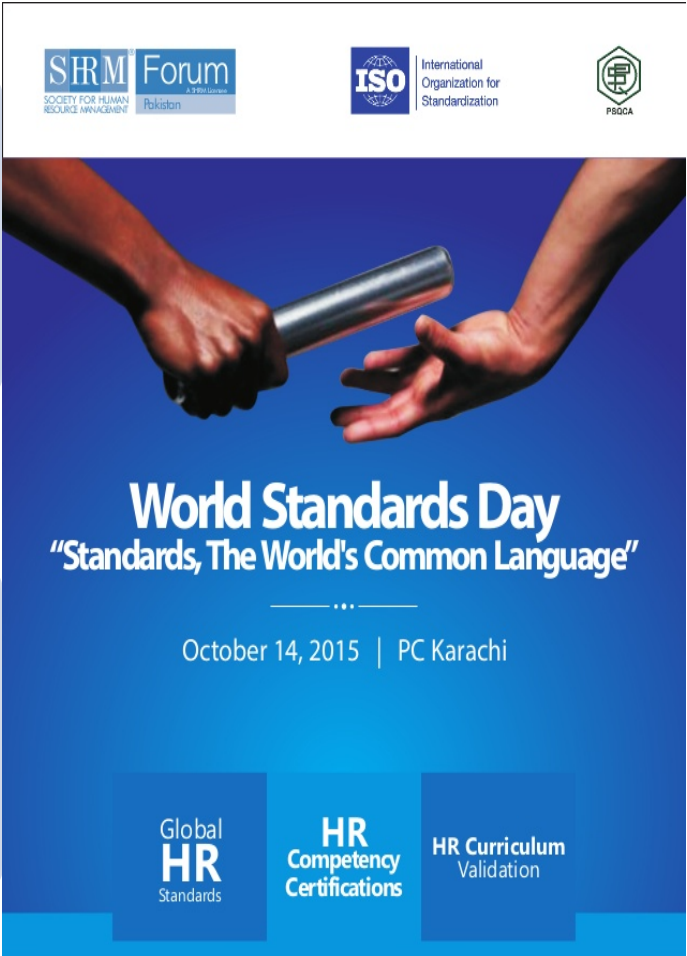
SQA Specifications

Specifications
can be:

- Explicit
- Implicit

Specifications
defined by:

- Provider
- External body



The poster features a central image of two hands, one holding a rolled-up document and the other reaching out. At the top, logos for SRM Forum (Society for Human Resource Management Pakistan), ISO (International Organization for Standardization), and PSCA are displayed. The main text reads "World Standards Day" and "Standards, The World's Common Language". Below this, the date "October 14, 2015" and location "PC Karachi" are listed. At the bottom, three categories are highlighted: "Global HR Standards", "HR Competency Certifications", and "HR Curriculum Validation".



Conclusion of The Chapter

- Conclusion #1
 - What is Quality ?
- Conclusion #2
 - What is Quality Assurance ?
- Conclusion #3
 - SQA Specification?



Assignment : ONE

APPENDIX: (A: Auditing Process) and (J: Review Process)

#Prepare class presentation for discussion