External standards, Techniques to help enhance software quality Study of any software project management software : viz Project 2000 or equivalent

External standards

- ## BS EN ISO 9001:200

The standard is built on a foundation of the following principles

- Understanding by an organization of the need of their customer so that they can meet or even exceed those requirements
- Leadership to provide the unity of purpose and direction needed to achieve quality objective
- Involvement of staff at all level
- A focus on individual process which create intermediate or deliverable product & service
- A focus on the system of interrelated processes that create delivered product & services
- Continuous improvement of the process
- Decision making based on factual evidence
- Building mutually beneficial relationships with suppliers

External Standards

ISO 15504

- ISO/IEC 15504 is a standard for process assessment that shares many concepts with CMMI
- The two standard should be compatible
- Like CMMI the standard is designed to provide guidance on the assessment of software development process

Techniques to help enhance software quality

- Three main themes emerge
- Increasing visibility
- Procedure structure
- Checking intermediate stages

Techniques to help enhance software quality

Inspections

- Techniques has been
- It is very effective way of removing superficial errors
- It motivates developers to produce better structured and self explanatory software
- It helps spread good programming practice
- It enhane team spirits

Techniques to help enhance software quality

The general principles behind fagan method

- Inspection are carried out on all major deliverables

- All types of defects are noted

- Inspection can be carried out by colligues at all levels except the very top

- Inspection can be carried using a predefined set of steps

Techniques to help enhance software quality

Structured programming and clean room
  software development

- With this type of development there are three
  separate teams

- A specification team

- A development team

- a certification team

Techniques to help enhance software quality

Formal methods

- Precondition
- Post condition

Techniques to help enhance software quality

Software quality circle

- Staff are involved in the identification of sources of errors through the formation of quality circle. These can be set up in all departments of an organizations including those producing software where they are known as software quality circle(SWQC)

Study of any software project management software : viz Project 2000 or equivalent

- **Microsoft Project** is a project management software program, developed and sold by Microsoft, which is designed to assist a project manager in developing a plan, assigning resources to tasks, tracking progress, managing the budjet, and analysing workloads.
- Microsoft Project was the company's third Microsoft Windows-based application, and within a couple of years of its introduction it became the dominant PC-based project management software.
- . Microsoft Project's proprietary file format is *.mpp*.
- Microsoft Project and Microsoft Project Server are the cornerstones of the Microsoft Office enterprise project management (EPM) product.

Application & Scope of research

Application

- PRINCE2

Scope of research

- Development of new software quality

Techniques to help enhance software quality

Q.1) Write a short note on Techniques to help enhance software quality

Q2) Discuss External standards