SNS COLLEGE OF ENGINEERING

Department of Information Technology

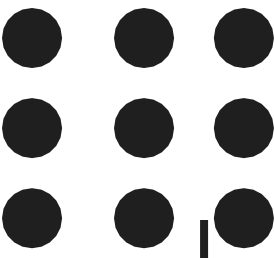### Course Name – Software Engineering

II Year / III Semester

Topic 2 – Clean Room Engineering
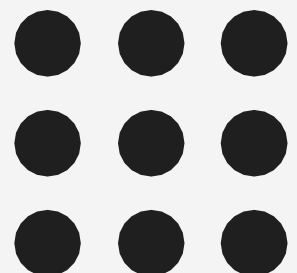
Clean Room Software Engineering

- Clean room software engineering is a software development approach to producing quality software.
- An efficient and good quality software product is delivered to the client as QA (Quality Assurance) is performed each and every phase of software development.
- A set of principles and practices for gathering requirements, designing, coding, testing, managing, etc. which not only improves the quality of the product but also increases productivity and reduces development cost.

Processes of Cleanroom development

- **Management** –
  It is persistent throughout the whole project lifetime which consists of project mission, schedule, resources, risk analysis, training, configuration management, etc.
- **Specification** –
  It is considered the first process of each increment which consists of requirement analysis, function specification, usage specification, increment planning, etc.
- **Development** –
  It is considered the second process of each increment which consists of correctness verification, incremental design, etc.
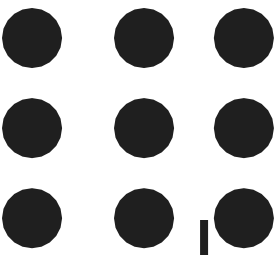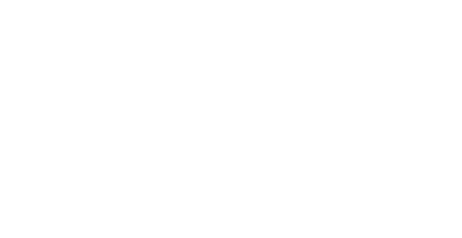- **Certification** –
  It is considered the final process of each increment which consists of usage modeling and test planning, statistical training and certification process, etc.

Benefits of Clean Room Software engineering :
- Delivers high-quality products.
- Increases productivity.
- Reduces development cost.
- Errors are found early.
- Reduces the overall project time.
- Saves resources.

THANK YOU