5)AGILE METHODOLOGY AND PRINCIPLES:

**ABOUT:**

* In agile methodologies, after every iteration the customer is able to see the result and understand whether he is satisfied with the requirement or not.
* Agile methods break tasks into smaller iterations, or parts do not directly involve long term planning.
* each iteration is considered as a short time “frame” in the agile process model, which typically lasts from one to four weeks.
* The division of the entire project into smaller parts help to minimize the project risk and to reduce the overall project delivery time requirements.
* Each iteration involves a team working through a full software development life cycle including,
* Planning
* Requirement analysis
* Design
* Coding
* Testing

Before a working product is demonstrated to the client.

**Principles:**

**Agile principle 1;**

“Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.”

**Agile principle 2;**

“Welcome changing requirements, even late in development. Agile process harness change for the customer’s competitive advantage.”

**Agile principle 3;**

“Deliver working software frequently from a couple of weeks to a couple of months, with a preference to the shorter timescale.”

**Agile principle 4;**

“Business people and developers must work together daily throughout the project.”

**Agile principle 5;**

“Build projects around motivated individuals. Give them the environment and support they need and trust them to get the job done.”

**Agile principle 6;**

“The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.”

**Agile principle 7;**

“Working software is the primary measure of progress.”

**Agile principle 8;**

“Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.”

**Agile principle 9;**

“Continuous attention to technical excellence and good design enhances agility.”

**Agile principle 10;**

“Simplicity-the art of maximizing the amount of work not done-is essential.”

**Agile principle 11;**

“The best architectures, requirements, and designs emerge from self-organizing teams.”

**Agile principle 12;**

“At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behaviour accordingly.”