1. Discuss the prototyping model. What is the effect of

designing a prototype on the overall cost of the

project?

Ans- Prototyping model-

Prototyping is defined as the process of developing a working replication of a product or system that has to be engineered. It offers a small scale facsimile of the end product and is used for obtaining customer feedback.

The Prototyping Model is one of the most popularly used Software Development Life Cycle Models (SDLC models). This model is used when the customers do not know the exact project requirements beforehand. In this model, a prototype of the end product is first developed, tested and refined as per customer feedback repeatedly till a final acceptable prototype is achieved which forms the basis for developing the final product.

the effect ofdesigning a prototype on the overall cost of theproject-

Prototyping may have some initial costs of developing, but it reduces the overall budget by helping your product to be free of the errors or glitches that could have occurred if the idea was made from scratch without any prior user testing. Furthermore, prototyping also helps to understand the intrinsic flaws, shortcomings and drawbacks that can be improved during the product development process. If the prototyping process is ignored completely, it might result in the restructuring and redesigning of the entire product after spending all your resources on its development. So, the effect of designing a prototype on the overall cost of a software project is to actually reduce the additional costs of restructuring and reframing it after its full-fledged development- which might cost a fortune.

Q2.Compare iterative enhancement model andevolutionary process model.

The Iterative Enhancement Model is an approach to building software in which the overall lifecycle is compose of several iterations in sequence. The Evolutionary Enhancement Model is designed to be allowed to evolve in response to the customers' feedback.

Q3.As we move outward along with process flow path ofthe spiral model, what can we say about softwarethat is being developed or maintained.

Ans-As work moves outward on the spiral, the product moves toward a more complete state and the level of abstraction at which work is performed is reduced (i.e., implementation specific work accelerates as we move further from the origin).

Q4.Explain the Scrum Agile methodology.

Ans-Agile scrum methodology is the combination of the agile philosophy and the scrum framework. Agile means “incremental, allowing teams to develop projects in small increments. Scrum is one of the many types of agile methodology, known for breaking projects down into sizable chunks called “sprints.” Agile scrum methodology is good for businesses that need to finish specific projects quickly.

Agile scrum methodology is a project management system that relies on incremental development. Each iteration consists of two- to four-week sprints, where the goal of each sprint is to build the most important features first and come out with a potentially deliverable product. More features are built into the product in subsequent sprints and are adjusted based on stakeholder and customer feedback between sprints.

Whereas other project management methods emphasize building an entire product in one operation from start to finish, agile scrum methodology focuses on delivering several iterations of a product to provide stakeholders with the highest business value in the least amount of time.

Agile scrum methodology has several benefits. First, it encourages products to be built faster, since each set of goals must be completed within each sprint’s time frame. It also requires frequent planning and goal setting, which helps the scrum team focus on the current sprint’s objectives and increase productivity.

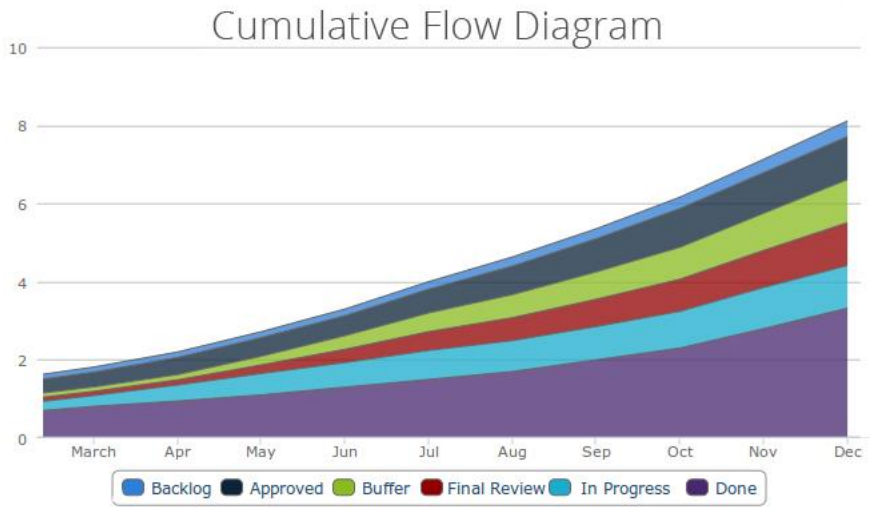
Q5.Explain the utility of Kanban CFD reports.

Ans- CFD-The cumulative flow diagram (also known as CFD) is one of the most advanced Kanban and Agile analytics charts. It provides a concise visualization of the three most important metrics of your flow: Cycle time. Throughput.

It provides teams with a visualization of workflow efforts and overall project progress. The cumulative flow diagram allows teams to monitor how stable their workflow is, anticipate bottlenecks so they can adjust their workflow accordingly, and help make processes more predictable.

The Cumulative Flow Diagram visualises how tasks mount up over time, together with their distribution along the process stages. The graph is built from different colored bands of tasks gathered in various columns. One color represents one column - so that each band shows how many tasks sit at what stage of the process, in a given time - the horizontal value.

The ideal diagram you want to see is an evenly rising one, with bands staying more-less even, except for the "completed tasks" band, which should continuously be getting taller, just as the number of done tasks is hopefully always getting higher.



The CFD only requires 3 basic things from the process - a Backlog, an In Progress column and a Done section - using this type of division allows you to read valid and usable information from the diagram. Therefore, any team, that utilizes this kind of workflow division, can benefit from Cumulative Flow. Whether you use Scrum, Kanban or any other custom project management method, for as long as you organize it in task groups, the CFD will be of great help.