**Question 1 – Write Agile Manifesto**

**Answer:**

Agile manifesto includes four main value and twelve principles of Agile Software.

**Four Main Values:**

1. Individuals & Interactions over Processes & Tools
2. Working Software over Comprehensive Documentation
3. Customer Collaboration over Contract Negotiation
4. Responding to Change Over following plan

**Twelve Principles:**

1. **Customer Satisfaction:** Satisfy customer through early and continuous delivery of software.
2. **Change in Requirements:** Welcome changing requirements, even late in development. Agile process harness change for customer’s competitive advantage.
3. **Frequent Delivery:** Deliver working software frequently from weeks to months with preference to timescale.
4. **Team Work:** Business people and developers must work together throughout project.
5. **Motivation:** Build projects around motivated individuals. Provide support they need & trust to get the job done.
6. **Face to Face Conversation:** The most convenient method to communicate information to development team is face to face conversation.
7. **Progress measure:** Working software is primary measure of progress.
8. **Constant Pace:** Agile process promotes continuous development. The sponsors, developers and users maintain constant pace.
9. **Excellence & Design:** Continuous attention to technical excellence and good design.
10. **Simplicity:** The art of maximizing amount of work not done is essential.
11. **Self-Organizing Teams:** The best architectures, requirements and design will emerge from self-organizing teams.
12. **Adjusting as per Environment:** After specific intervals, teams should reflect on how to become more effective & adjust behavior accordingly.

**Question 2 – User Stories- Acceptance Criteria-BV-CP**

**Answer:**

**Q. 3 What is epic? Write 2 epics**

**Answer:**

Epic are the biggest user stories where you can divide into smaller parts. Epic can be set of small user stories to achieve one task.

Registration: As a customer I want to register in scrum food app so I can register myself.

Login: As a customer I am able to login in scrum food app.

**Q.4 What is difference between BV and CP?**

**Answer:**

BV is Business Complexity given as per importance of task. It is estimated by scrum currency notes. Ex. Rs. 10, Rs. 20, Rs. 50, Rs.100, Rs. 200, Rs. 500, Rs. 1000.

CP is complexity points are given by developers by as efforts taken to complete task. The CP estimated by Poker Cards like 1,2,3,5,8,13,20,40,100, BIG.

Business complexity numbers decided on business point of view while Complexity points decided on basis of effort taken by developer team.

**Q.5 Explain about Sprint.**

**Answer:**

 A sprint is scrum based agile methodology concept which is similar to iteration. A sprint is time boxed to deliver a specific set of user stories and produce working features within set period time. During sprint planning, customer or product owner specifies priority of user story and development team commits to complete for given sprint. During sprint, user stories can be removed from sprint but new user stories cannot get added. Non addition of user stories can help developing team to get more focus on accomplishing goal.

Sprint can range from 2 weeks but it may extend up to 4 weeks. It could not go longer than a month. Sprint more focuses on delivering goal, determining right team size to get optimal sprint length.

What is sprint Duration: 2weeks to 4 weeks

Scrum is subunit of sprint.

**Q.6 Product backlog & Sprint Backlog**

**Answer:**

**Product backlog:**

* It is list of all item that need to complete so product can be developed.
* Product owner is responsible for product backlog items.
* Product backlog specific to entire goal of product.
* It not dependent on sprint backlog.
* Until new product developed, product backlog remains same i.e. unchanged.

Product backlog shows project tasks and user stories, their deadlines, who’s assigned to complete them priority level and completion percentage

**Sprint Backlog:**

* It is list of items taken from product backlog and completed to complete sprint.
* The developer is responsible for sprint backlog items.
* Sprint backlog specific for particular sprint.
* Sprint backlog dependent on product backlog.
* For every new sprint, a new sprint backlog prepared.

Sprint backlog is subset of product backlog. The complexity of project determines complexity of sprint. Sprint backlog remains unchanged during sprint period. It can be changed during Sprint Planning Meeting.

**Q.7 What is impediments log? Write 2 impediments**

**Answer:**

Impediments are blockers which prevent scrum team to complete work which impact velocity of team. Impediments are obstacles which are recorded in impediments log. They are preventing scrum team to complete work and recorded in impediments log. All challenges faced by scrum team recorded in impediments log.

Ex. Lack of system knowledge

Lack of Management support.

**Q. 8 Explain velocity of team.**

**Answer:**

 Velocity is amount of work team can done during specific time. It is used to set plans, improve efficiency and set expected goals.

**Q.9 Draw sprint burn charts & product burn down charts (3)**

**Answer:**

Sprint Burn down Chart shows how much work needs to complete to complete sprint while product burn down chart shows he much left to complete project.

**Q.10 Explain about Product Grooming (2)**

**Answer:**

Product grooming is session in which vision or goal of project is discussed and who will be target group in which market segment does product address.

What are the needs and solution does product required.

It is process of planning project and understanding need of project. Similarly, product grooming requires to understand stakeholder requirement and addition to be done.

**Q.11 Explain roles of Scrum Master & Product Owner (3)**

**Answer:**

Product owner is responsible for product completion. Main job of product owner is to ensure about meeting needs of stakeholders as per requirements. He is also responsible for:

* Product vision
* Requirements questions
* Stakeholders Interest
* He can decide whether to

 -Accept project

 -Reject the project increment

 -Continue or discontinue with product development

 -Deliver product or not

* Market analysis
* SWOT analysis
* Similar products availability in market

Scrum Master will facilitate scrum process by resolving issues, create environment for team self-organization and capture data to adjust forecast.

**Q.12 Explain all meetings conducted in scrum project. (8)**

**Answer:**

In scrum there are four meetings conducted to get understanding of what is going on in project and is there any difficulty in project. The names of meetings are as below:

1. **Sprint Planning Meeting:** This meeting happens at the beginning of each project. In this meeting sprint team decides what will team is going to achieve during sprint.
2. **Daily Scrum Meeting:** Daily Scrum Meeting happen on daily basis to check –
	* + What did you today?
		+ What will you do tomorrow?
		+ Are there any impediments that are slowing you or stopping you?

3. **Sprint Review Meeting:** Sprint review meeting will conduct at the end of each sprint where team shows completed stories to product owner and get it cleared.

4. **Sprint Retrospective Meeting**: Sprint Retrospective Meeting happen at end of sprint where team will answer questions:

* + - What went well in the sprint?
		- What did not go well?
		- What are required areas of improvements in the next sprint?

**Q.13 Explain Sprint size and Scrum size.**

**Answer:**

**Sprint Size**

Sprint Size is the time period which team decides to achieve their outcomes. Normally, sprint period will be of 2 weeks but may be extend up to 4 weeks.

**Scrum Size**

Scrum size consists of BAs, Developers, Tester. Each scrum team will be average size of 7- 8 team members.

**Q.14 Explain DOD and DOR.**

Answer:

**DOD**:

-DOD is acronym for Definition of Done.

-DOD is criteria which shows when product is complete.

-DOD ensures about consistency and quality of product.

**DOR**:

-DOR is acronym for Definition of Ready.

-DOR is criteria where it shows product backlog items are ready for sprint.

-DOR ensures about right product working and team is prepared to work.

**Q.15 Explain prioritization techniques and MVP.**

**Answer:**

Prioritize requirements are requirements which used to sort out as per priority of requirements. They help to get urgency of requirements and sort accordingly. Factors influenced for priority are: Risk, Cost, Time, Benefits and strategy.

**MoSCoW**

MoSCoW is a prioritization technique which includes Must do, Should do, Could do and would do requirements.

Must do – These are mandatory requirements to meet business/stakeholders need.

Should do – These are requirements where we can proceed for that but product is not dependent on them.

Could do – These are requirements where they will not affect anything in project.

Would do – These are requirements do proceed later, not necessary to deliver at the time of product delivery.

**MVP**

MVP is Minimum Viable Product is technique which shows product has enough features to satisfy early need of stakeholder and ask them to provide feedback for future product.

**Q.16 Difference – Business Analyst and Product Owner**

**Answer:**

Product owner is responsible for product completion. Main job of product owner is to ensure about meeting needs of stakeholders as per requirements. He is also responsible for:

 1.Product vision

 2.Requirements questions

 3.Stakeholders Interest

 4.He can decide whether to:

-Accept project

-Reject the project increment

-Continue or discontinue with product development

-Deliver product or not

* Market analysis
* SWOT analysis
* Similar products availability in market

Business Analyst are problem solvers, facilitators and communicator between stakeholders and scrum team. They get requirements from stakeholders by asking questions, accessing needs, find gaps and understand all requirements using elicitation techniques.

**Question 17 – Prepare a sample Resume of 3yrs exp Product Owner**

**Answer:**