**Capstone Project2 –Agile-Scrum**

Q1) Question 1 – write Agile Manifesto – 8 Marks

Four main Values

1) Individuals and interactions over processes and tools

2) Working software over comprehensive documentation

3) Customer collaboration over contract negotiation

4) Responding to change over following a plan

Twelve Principles of Agile Software

1.Satisfy the customer through early and continuous delivery of valuable software.

2.Welcome changing requirements, even late in development. Agile processes harness change for

the customer's competitive advantage.

3.Deliver working software frequently, from a couple of weeks to a couple of months, with a

preference to the shorter timescale.

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

5.Build projects around motivated individuals. Give them the environment and support they need,

and trust them to get the job done.

6. The most efficient and effective method of conveying information to and within a development

team is face-to-face conversation.

7. Working software is the primary measure of progress.

8. Agile processes promote sustainable development. The sponsors, developers, and users should be

able to maintain a constant pace indefinitely.

9. Continuous attention to technical excellence and good design enhances agility.

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

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

12.At regular intervals, the team reflects on how to become more effective, then tunes and adjusts

its behavior accordingly.

Question 2) Write minimum 40 User stories and their Acceptance Criteria along with their BV and CP

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| **User Story no: 001** | Tasks: Registration of customers | Priority: Highest |
| AS A CUSTOMER | | |
| I WANT TO REGISTER TO SCRUM FOOD APP | | |
| SO THAT I CAN ORDER FOOD | | |
| BV: 500 | | CP: 10 |
| Acceptance Criteria | | |
| Should have email address, location, mobile phone number and should verify with OTP | | |
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| **User Story no: 002** | Tasks: Registration of restaurant | Priority: Highest |
| AS A RESTAURANT OWNER | | |
| I WANT TO REGISTER TO SCRUM FOOD APP | | |
| SO THAT I CAN SELL FOOD ON THE APP | | |
| BV: 500 | | CP: 10 |
| Acceptance Criteria | | |
| Should have a registered business, menu, email address, mobile phone number and should verify with OTP | | |
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| **User Story no: 003** | Tasks: Registration of delivery boy | Priority: Highest |
| AS A DELIVERY BOY | | |
| I WANT TO REGISTER TO SCRUM FOOD APP | | |
| SO THAT I CAN DELIVER PARCELS | | |
| BV: 500 | | CP: 10 |
| Acceptance Criteria | | |
| Should have a registered driving license, government id, email address, mobile phone number and should verify with OTP | | |
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| **User Story no: 004** | Tasks: Registration of Regional Administrator | Priority: Highest |
| AS A REGIONAL ADMINISTRATOR | | |
| I WANT TO REGISTER TO SCRUM FOOD APP | | |
| SO THAT I CAN MANAGE THE RESTAURANTS AND DELIVERY BOYS IN MY REGION ALONG WITH GRIEVENCES AND COMPLAINTS | | |
| BV: 500 | | CP: 10 |
| Acceptance Criteria | | |
| Should have a employee code,official email address, mobile phone number and should verify with OTP | | |
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| **User Story no: 005** | Tasks: Registration of Administrator | Priority: Highest |
| AS AN ADMINISTRATOR | | |
| I WANT TO REGISTER TO SCRUM FOOD APP | | |
| SO THAT I CAN MANAGE THE RESTAURANTS AND DELIVERY BOYS , GREIVENECES AND COMPLAINTS | | |
| BV: 500 | | CP: 10 |
| Acceptance Criteria | | |
| Should have a employee code,official email address, mobile phone number and should verify with OTP | | |

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| **User Story no: 006** | Tasks: Login of customers | Priority: Highest |
| AS A CUSTOMER | | |
| I WANT TO LOGIN TO SCRUM FOOD APP | | |
| SO THAT I CAN ORDER FOOD | | |
| BV: 500 | | CP: 10 |
| Acceptance Criteria | | |
| Should have email address, mobile phone number and should verify with OTP | | |
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| **User Story no: 007** | Tasks: Login of restaurant | Priority: Highest |
| AS A RESTAURANT OWNER | | |
| I WANT TO LOGIN TO SCRUM FOOD APP | | |
| SO THAT I CAN SELL FOOD ON THE APP & CHECK MY REVENUE A;;ONG WITH DELIVERY BOY DETAILS | | |
| BV: 500 | | CP: 10 |
| Acceptance Criteria | | |
| Should have a registered business, menu, email address, mobile phone number and should verify with OTP | | |
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| **User Story no: 008** | Tasks: Registration of delivery boy | Priority: Highest |
| AS A DELIVERY BOY | | |
| I WANT TO LOGIN TO SCRUM FOOD APP | | |
| SO THAT I CAN ACCEPT & DELIVER PARCELS & CHECK MY REVENUE | | |
| BV: 500 | | CP: 10 |
| Acceptance Criteria | | |
| Should have a registered driving license, government id, email address, mobile phone number and should verify with OTP | | |
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| **User Story no: 009** | Tasks: Login of Regional Administrator | Priority: Highest |
| AS A REGIONAL ADMINISTRATOR | | |
| I WANT TO LOGIN TO SCRUM FOOD APP | | |
| SO THAT I CAN MANAGE THE RESTAURANTS AND DELIVERY BOYS IN MY REGION ALONG WITH RESPONDING TO GRIEVENCES AND COMPLAINTS | | |
| BV: 500 | | CP: 10 |
| Acceptance Criteria | | |
| Should have a employee code,official email address, mobile phone number and should verify with OTP | | |
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| **User Story no: 010** | Tasks: Login of Administrator | Priority: Highest |
| AS AN ADMINISTRATOR | | |
| I WANT TO LOGIN TO SCRUM FOOD APP | | |
| SO THAT I CAN MANAGE THE RESTAURANTS AND DELIVERY BOYS , GREIVENECES AND COMPLAINTS | | |
| BV: 500 | | CP: 10 |
| Acceptance Criteria | | |
| Should have a employee code,official email address, mobile phone number and should verify with OTP | | |

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| **User Story no: 011** | Tasks: Check my orders for customers | Priority: Highest |
| AS A CUSTOMER | | |
| I WANT TO CHECK MY CURRENT AND PREVIOUS ORDERS | | |
| SO THAT I CAN TRACK THE CURRENT DELIVERIES AND PAST ORDERS | | |
| BV: 500 | | CP: 10 |
| Acceptance Criteria | | |
| Should have ordered food before | | |
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| **User Story no: 012** | Tasks: Check orders for restaurant | Priority: Highest |
| AS A RESTAURANT OWNER | | |
| I WANT TO CHECK MY CURRENT AND PREVIOUS ORDERS | | |
| SO THAT I CAN PREPARE FOOD ACCORDINGLY AND FULFILL THE ORDERS ALONG WITH UNDERSTANDING MY REVENUE | | |
| BV: 500 | | CP: 10 |
| Acceptance Criteria | | |
| Should have received orders from the customer and should be able to login | | |
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| **User Story no: 013** | Tasks: CHECK ORDERS FOR DELIVERY BOY | Priority: Highest |
| AS A DELIVERY BOY | | |
| I WANT TO CHECK MY CURRENT AND PREVIOUS ORDERS | | |
| SO THAT I CAN ACCEPT & DELIVER PARCELS & CHECK MY REVENUE | | |
| BV: 500 | | CP: 10 |
| Acceptance Criteria | | |
| Should have orders and must be able to login | | |
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| **User Story no: 014** | Tasks: Check Orders for Regional Administrator | Priority: Highest |
| AS A REGIONAL ADMINISTRATOR | | |
| I WANT TO CHECK ORDERS | | |
| SO THAT I CAN UNDERSTAND THE FULFILMENT RATIO OF RESTAURANTS, DELIVERY BOYS AND SEE FEEDBACKS FOR THE FOOD AND DELIVERY BOYS IN MY REGION | | |
| BV: 500 | | CP: 10 |
| Acceptance Criteria | | |
| Should have restaurants and delivery boys registered in the region with order history | | |
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| **User Story no: 015** | Tasks: Login of Administrator | Priority: Highest |
| AS AN ADMINISTRATOR | | |
| I WANT TO CHECK ORDERS | | |
| SO THAT I CAN UNDERSTAND THE FULFILMENT RATIO OF RESTAURANTS, DELIVERY BOYS AND SEE COMPLAINTS AND GREVIENCES | | |
| BV: 500 | | CP: 10 |
| Acceptance Criteria | | |
| Should have restaurants and delivery boys registered in the region with order history | | |

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| **User Story no: 016** | Tasks: Track delivery for customers | Priority: Highest |
| AS A CUSTOMER | | |
| I WANT TO TRACK MY ORDER | | |
| SO THAT I CAN UNDERSTAND THE EXPECTED DELIVERY TIME | | |
| BV: 200 | | CP: 8 |
| Acceptance Criteria | | |
| Should have ordered food & has active mobile network | | |
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| **User Story no: 017** | Tasks: Update delivery for delivery boys | Priority: Highest |
| AS A DELIVERY BOY | | |
| I WANT TO UPDATE THE STATUS OF DELIVERY | | |
| SO THAT THE CUSTOMER CAN UNDERSTAND THE EXPECTED DELIVERY TIME | | |
| BV: 200 | | CP: 8 |
| Acceptance Criteria | | |
| Should have accepted order and should update the status | | |
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| **User Story no: 018** | Tasks: Check assigned delivery boy for the order | Priority: Highest |
| AS A DELIVERY BOY | | |
| I WANT TO CHECK THE ASSIGNED DELIVERY BOY FOR AN ORDER | | |
| SO THAT I CAN HANDOVER THE PARCEL TO THE CONCERNED PERSON | | |
| BV: 200 | | CP: 8 |
| Acceptance Criteria | | |
| Should have accepted the order and must be able to add OTP from the delivery boy | | |
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| **User Story no: 019** | Tasks: Check Delivery Times and Food preparation time for the order | Priority: Highest |
| AS A REGIONAL ADMINISTRATOR | | |
| I WANT TO CHECK THE TIME FOR DELIVERY AND FOOD PREPARATION | | |
| SO THAT I CAN ENSURE THAT THINGS ARE UPTO THE MARK | | |
| BV: 200 | | CP: 8 |
| Acceptance Criteria | | |
| Should have restaurants and delivery boys registered in the region with live tracking | | |

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| **User Story no: 020** | Tasks: Raise issues for customers | Priority: Highest |
| AS A CUSTOMER | | |
| I WANT TO HAVE AN OPTION TO RAISE ISSUES WITH THE FOOD AND DELIVERY | | |
| SO THAT I CAN COMPLAINT IF NECESSARY | | |
| BV: 200 | | CP: 7 |
| Acceptance Criteria | | |
| Should have ordered food & MUST HAVE IT DELIVERED | | |
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| **User Story no: 021** | Tasks: Raise issues for delivery boys | Priority: Highest |
| AS A DELIVERY BOY | | |
| I WANT TO HAVE AN OPTION TO RAISE ISSUES REGARDING RESTAUTANTS AND CUSTOMERS | | |
| SO THAT I CAN COMPLAINT IF NECESSARY | | |
| BV: 200 | | CP: 7 |
| Acceptance Criteria | | |
| Should have accepted the food orderand must be loged in to the application | | |
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| **User Story no: 022** | Tasks: Raise issues for restaurants | Priority: Highest |
| AS A RESTAURANT | | |
| I WANT TO HAVE AN OPTION TO RAISE ISSUES REGARDING DELIVERY BOYS AND CUSTOMERS | | |
| SO THAT I CAN COMPLAINT IF NECESSARY | | |
| BV: 200 | | CP: 7 |
| Acceptance Criteria | | |
| Must have completed orders with the delivery boy or the customer | | |
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| **User Story no: 023** | Tasks: Resolve issues for R. Administrator | Priority: Highest |
| AS A REGIONAL ADMINISTRATOR | | |
| I WANT TO HAVE AN OPTION TO VIEW THE OPEN ISSUES | | |
| SO THAT I CAN RESOLVE THEM | | |
| BV: 200 | | CP: 7 |
| Acceptance Criteria | | |
| Should have restaurants and delivery boys registered in the region with access to view issues | | |
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| **User Story no: 024** | Tasks: Resolve issues for Administrator | Priority: Highest |
| AS AN ADMINISTRATOR | | |
| I WANT TO HAVE AN OPTION TO VIEW THE OPEN ISSUES | | |
| SO THAT I CAN TRACK AND RESOLVE ISSUES IF REQUIRED | | |
| BV: 200 | | CP: 7 |
| Acceptance Criteria | | |
| Should have restaurants and delivery boys registered with access to view issues | | |

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| **User Story no: 025** | Tasks: View menu for customers | Priority: Highest |
| AS A CUSTOMER | | |
| I WANT TO VIEW MENU | | |
| SO THAT I CAN ORDER FOOD ITEMS | | |
| BV: 200 | | CP: 7 |
| Acceptance Criteria | | |
| Should have registered and logged in to the app, also should have selected a restaurant to see the menu | | |
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| **User Story no: 026** | Tasks: Update/upload menu for restaurants | Priority: Highest |
| AS A RESTAURANT | | |
| I WANT TO ADD MENU | | |
| SO THAT CUSTOMERS CAN ORDER FOOD ITEMS | | |
| BV: 200 | | CP: 7 |
| Acceptance Criteria | | |
| Should have registered the business and must have prepared a menu | | |
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| **User Story no: 027** | Tasks: Add address for users | Priority: Highest |
| AS A CUSTOMER | | |
| I WANT TO ADD ADDRESS | | |
| SO THAT I CAN GET THE FOOD ITEMS DELIVERED TO THE ADRESS OF MY CHOICE | | |
| BV: 200 | | CP: 7 |
| Acceptance Criteria | | |
| Should have registered AND MUST HAVE LOGGED IN TO THE APP | | |
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| **User Story no: 028** | Tasks: Add address for restaurants | Priority: Highest |
| AS A RESTAURANT | | |
| I WANT TO ADD ADDRESS | | |
| SO THAT CUSTOMERS CAN UNDERSTAND THE LOCATION OF MY RESTAURANT | | |
| BV: 200 | | CP: 7 |
| Acceptance Criteria | | |
| Should have registered AND MUST HAVE LOGGED IN TO THE APP | | |
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| **User Story no: 029** | Tasks: Select payment options for customer | Priority: Highest |
| AS A CUSTOMER | | |
| I WANT TO ADD A PAYMENT OPTION | | |
| SO THAT I CAN MAKE A PAYMENT FOR MY ORDER | | |
| BV: 1000 | | CP: 7 |
| Acceptance Criteria | | |
| Should be able to use UPI, cards, COD and all payment options | | |
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| **User Story no: 030** | Tasks: Feedback options for customer | Priority: Highest |
| AS A CUSTOMER | | |
| I WANT TO HAVE A FEEDBACK OPTION | | |
| SO THAT I CAN SHARE A FEEDBACK FOR THE RESTAURANT, FOOD & DELIVERY BOY | | |
| BV: 100 | | CP: 5 |
| Acceptance Criteria | | |
| Should have placed an order and must be able to share pics. | | |
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| **User Story no: 031** | Tasks: Rate options for customer | Priority: Highest |
| AS A CUSTOMER | | |
| I WANT TO HAVE A RATING OPTION | | |
| SO THAT I CAN RATE A RESTAURANT, THE FOOD & DELIVERY BOY | | |
| BV: 100 | | CP: 5 |
| Acceptance Criteria | | |
| Should have placed an order and must be able to login to the application. | | |
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| **User Story no: 031** | Tasks: View feedback for delivery boys | Priority: Highest |
| AS A DELIVERY BOY | | |
| I WANT TO HAVE THE OPTION TO CHECK MY FEEDBACK | | |
| SO THAT I CAN WORK ON THE FEEDBACKS | | |
| BV: 100 | | CP: 5 |
| Acceptance Criteria | | |
| Should have registered , completed orders and must be able to login to the application. | | |
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| **User Story no: 032** | Tasks: View ratings for delivery boys | Priority: Highest |
| AS A DELIVERY BOY | | |
| I WANT TO HAVE THE OPTION TO CHECK MY RATINGS | | |
| SO THAT I CAN WORK ON THE THEM | | |
| BV: 100 | | CP: 5 |
| Acceptance Criteria | | |
| Should have registered , completed orders and must be able to login to the application. | | |
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| **User Story no: 033** | Tasks: View ratings for restaurants | Priority: Highest |
| AS A RESTAURANT | | |
| I WANT TO HAVE THE OPTION TO CHECK MY RATINGS | | |
| SO THAT I CAN WORK ON THE THEM | | |
| BV: 100 | | CP: 5 |
| Acceptance Criteria | | |
| Should have registered , completed orders and must be able to login to the application. | | |
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| **User Story no: 034** | Tasks: View feedback for restaurants | Priority: Highest |
| AS A RESTAURANT | | |
| I WANT TO HAVE THE OPTION TO CHECK MY FEEDBACK | | |
| SO THAT I CAN WORK ON THE FEEDBACKS | | |
| BV: 100 | | CP: 5 |
| Acceptance Criteria | | |
| Should have registered , completed orders and must be able to login to the application. | | |

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| **User Story no: 035** | Tasks: Registration of Business Owner | Priority: Highest |
| AS A BUSINESS OWNER | | |
| I WANT TO REGISTER TO SCRUM FOOD APP | | |
| SO THAT I CAN CHECK REPORTS, MAKE PAYMENTS AND SOLVE ISSUES | | |
| BV: 1000 | | CP: 10 |
| Acceptance Criteria | | |
| Should have product owner access,email address, mobile phone number and should verify with OTP | | |
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| **User Story no: 036** | Tasks: Login of business owner | Priority: Highest |
| AS A BUSINESS OWNER | | |
| I WANT TO LOGIN TO SCRUM FOOD APP | | |
| SO THAT I CAN CHECK REPORTS, MAKE PAYMENTS AND SOLVE ISSUES | | |
| BV: 1000 | | CP: 10 |
| Acceptance Criteria | | |
| Should have product owner access,email address, mobile phone number and should verify with OTP | | |
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| **User Story no: 037** | Tasks: View reports | Priority: Highest |
| AS A BUSINESS OWNER | | |
| I WANT TO VIEW BUSINESS REPORTS | | |
| SO THAT I CAN BE ALLIGNED WITH THE BUSINESS OBJECTIVES | | |
| BV: 1000 | | CP: 10 |
| Acceptance Criteria | | |
| Should have product owner access,email address, mobile phone number and should verify with OTP | | |
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| **User Story no: 038** | Tasks: View reports for business owner | Priority: Highest |
| AS A BUSINESS OWNER | | |
| I WANT TO VIEW BUSINESS REPORTS | | |
| SO THAT I CAN BE ALLIGNED WITH THE BUSINESS OBJECTIVES | | |
| BV: 1000 | | CP: 10 |
| Acceptance Criteria | | |
| Should have product owner access,email address, mobile phone number and should verify with OTP | | |
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| **User Story no: 039** | Tasks: UPDATE payment for business owner | Priority: Highest |
| AS A BUSINESS OWNER | | |
| I WANT TO HAVE AN OPTION TO UPDATE PAYMENT | | |
| SO THAT I CAN UPDATE PAYMENTS FOR RESTAURANTS AND DELIVERY BOYS | | |
| BV: 1000 | | CP: 10 |
| Acceptance Criteria | | |
| Should have product owner access,email address, mobile phone number and should verify with OTP | | |
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| **User Story no: 040** | Tasks: Add item to cart for customer | Priority: Highest |
| AS A CUSTOMER | | |
| I WANT TO HAVE AN OPTION TO ADD ITEMS TO CART | | |
| SO THAT I CAN PLACE ORDER | | |
| BV: 500 | | CP: 10 |
| Acceptance Criteria | | |
| Should have logged in to the app and active mobile network | | |

Question 3) Question 3– What is epic? Write 2 epics – 5 Marks

Answer) An epic is a relatively large user story. An epic is broken down into themes and then user stories. Epics, are larger user stories that can be broken down into smaller, manageable stories before the start of a sprint. An epic is a significant piece of work that will strategically add value to your product and business.

1. Login – Consumer, restaurants, delivery boys, regional administrator, administrator and business owner should be able to login with Email ID and Password
2. Register: Consumer, restaurants, delivery boys, regional administrator, administrator and business owner should be able to register with Email ID and Password

Question 4) What is he difference between BV and CP:

BV – Business Value This is not the cost of Development or the complexity of the feature. Business Value is how important is this feature (user Story) to the Business. This is estimated by Scrum Currency Notes. We provide Rs 1000. Rs 500, Rs 100, Rs 50, Rs 20 and Rs 10 Denominations. These estimations are done by the Stakeholders (Clients). If different values are selected by the stakeholders, then discussions will happen, and they agree to one BV value to that user story.

CP – Complexity Points CP is also known as Story Points (SP). CP is the effort required by the Scrum Developers to develop this feature (user story) using technology. Efforts include time taken to solve the complexity and write the code. CP is estimated by the Scrum Developers by using Poker cards. We provide pokers with values “?”, 1, 2, 3, 5, 8, 13, 20, 40, 100 and BIG. If the entire Project development takes 200 points, then this user story coding effort will be… how many points? … Thinking in this way, Scrum Developers will give CP to the User story. If different values are selected by the Scrum Developers, then discussions will happen, and they agree to one CP value to that user story.

Question 5) Question 5 –Explain about Sprint– 5 Marks

What is sprint Duration: 2 Weeks - Your sprint Value is 2 weeks

Scrum is a subunit of Sprint.

What is scrum Duration: 1 day – Your scrum Value ? 1 day

PBI: Contain list of all the user stories and Epic created by Product owner

Task: Unit of Work done by 1 Developer in 1 Scrum

**WIP: Work In Progress**; the features that are in the production process / Phase but not yet the finished product. WIP therefore refers to all the task that are at various stages of the production process.

**Sprint Backlog** -includes a List of committed user stories by Development and QA team for that particular sprint will be added in the sprint backlog

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| PBI | Tasks | WIP | Done |
| Login | Login user with registered email id and password. An OTP will be sent for two way authentication | Adding the email option | In progress |
|  |  | Adding the password bar | In progress |
|  |  | Mechanism for sending OTP | In progress |

Question 6 – Explain Product backlog and sprint back log

– A product backlog is a prioritized list of work for the development team that is derived from the roadmap and its requirements.

A product backlog includes all user stories, requirements and epics.

The most important items are shown at the top of the product backlog so the team knows what to deliver first.

-Sprint back log – is the subset of product backlog A sprint backlog is the set of items that a cross-functional product team selects from its product backlog to work on during the upcoming sprint. Typically, the team will agree on these items during its sprint planning session. In fact, the sprint backlog represents the primary output of sprint planning.

Question 7)