Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Mobile UI	USN-1	As a user, I can study the river water quality by registering into Mobile app	10	High	Gokul Ram S, Ajay S
Sprint-1	Secure Login	USN-2	As a user, I can login into App securely and my login credentials are securely stored in database	5	High	Gokul Ram S, Ajay S, Vinodhini R
Sprint-1	Alerting Authority	USN-3	As a user, I can alert the authority by sending mail or SMS using Mobile App	5	Low	Ajay S, Rajkumar S
Sprint-2	Node-Red Web UI design	USN-4	As a user, I can see the water parameters in web application dashboard	20	Medium	Gokul Ram S Vinodhini R
Sprint-3	Python code	USN-5	Sending Sensor data values to IBM Watson cloud using python code.	20	High	Vinodhini R Rajkumar S
Sprint-4	Monitoring	USN-6	For Real-Time water quality monitoring, messages are immediately send to concerned authorities when parameters cross threshold.	20	High	Gokul Ram S, Ajay S Vinodhini R, Rajkumar S

Project Tracker, Velocity & Burndown Chart: (4 Marks)

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022

Velocity:

$$AV = \frac{sprint\ duration}{velocity} = \frac{20}{10} = 2$$

Burndown Chart:

Burndown Chart