# Project Planning Phase (Product Backlog, Sprint Planning, Stories, Story points)

| Date          | 28 October 2022                                      |
|---------------|--|
| Team ID       | PNT2022TMID23864                                     |
| Project Name  | Signs with Smart Connectivity for Better Road Safety |
| Maximum Marks | 8 Marks  |

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

Use the below template to create product backlog and sprint scheme

| Sprint   | Functional<br>Requirement<br>(Epic) | User Story / Task   | Story<br>Points | Priority | Team Members                         |
|----------|-------------------------------------|---|-----------------|----------|--------------------------------------|
| Sprint-1 | Resources Initialization            | Create and initialize accounts in various public APIs like Open Weather Map API.        | 1               | LOW      | Kowsanth<br>Naveen<br>Harish<br>Raji |
| Sprint-1 | Local Server/Software<br>Run        | Write a Python program that outputs results given the inputs like weather and location. | 1               |          | Kowsanth<br>Naveen<br>Harish<br>Raji |

| Sprint-2 | Push the server/software to cloud | Push the code from Sprint 1 to cloud so it can be accessed from anywhere                        | 2 | MEDIUM | Kowsanth<br>Naveen<br>Harish<br>Raji |
|----------|-----------------------------------|---|---|--------|--------------------------------------|
| Sprint-3 | Hardware initialization           | Integrate the hardware to be able to access the cloud functions and provide inputs to the same. | 2 | HIGH   | Kowsanth<br>Naveen<br>Harish<br>Raji |
| Sprint-4 | UI/UX Optimization & Debugging    | Optimize all the shortcomings and provide better user experience.                               | 2 | LOW    | Kowsanth<br>Naveen<br>Harish<br>Raji |

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

| Sprint   | Total<br>Story<br>Points | Duratio<br>n | Sprint Start<br>Date | Sprint End<br>Date<br>(Planned) | Story Points Completed (as on Planned End Date) | Sprint Release<br>Date(Actual) |
|----------|--------------------------|--------------|----------------------|---------------------------------|---|--------------------------------|
| Sprint-1 | 20                       | 6 Days       | 23 Oct 2022          | 28 Oct 2022                     | 20  | 30 Oct 2022                    |
| Sprint-2 | 20                       | 6 Days       | 31 Oct 2022          | 07 Nov 2022                     | 20  | 31 Oct 2022                    |
| Sprint-3 | 20                       | 6 Days       | 07 Nov 2022          | 13 Nov 2022                     | 20  | 08 Nov 2022                    |
| Sprint-4 | 20                       | 6 Days       | 14 Nov 2022          | 20 Nov 2022                     | 20  | 19 Nov 2022                    |

## **Velocity:**

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

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

## **Burndown Chart:**

