Project Design
Phase-I Solution
Architecture

Date	03 October 2022
Team ID	PNT2022TMID49070
Project Name	Emerging Methods for Early Detection of Forest Fires.

 Maximum Marks: 4marks

Solution Architecture Diagram:

Medium altitude flight area (350 m to 5500 m)

Medium altitude fixed wing UAV

Low altitude flight area (10 m to 350 m)

Low altitude rotary wing UAV

Ground level

Permanent monitoring, data collection and processing.

Is fire detected? — NO / YES

Potential fire alert! Launch low altitude UAV!

Is fire confirmed? — NO / YES

False fire alert! Low altitude UAV returns to base. Medium altitude UAV maintains observation.

Real fire alert! Contact ground level teams! Medium altitude UAV maintains observation.

Low altitude UAV provides assistance to the ground level teams and performs post-fire damage assesment.

Low altitude UAV on-demand observation area

Medium Altitude UAV permanent observation area