

**Project Design Phase-I**  
**Proposed Solution Template**

Date	19 September 2022
Team ID	PNT2022TMID11740
Project Name	Emerging Methods for Early Detection of Forest Fires
Maximum Marks	2 Marks

**Proposed Solution Template:**

S.NO	Parameter	Description
1.	Problem Statement (Problem to be solved)	Detecting the forest fire at the most earliest possible time to reduce its impact on our environment in all possible ways
2.	Idea / Solution description	Use computer vision methods for recognition and detection of smoke or fire, based on the still images or the videoinput from the drone cameras.
3.	Novelty / Uniqueness	We classify the pixels using the CNN algorithm withan efficient mobile alert system that sends messages to corresponding authorities
4.	Social Impact / Customer Satisfaction	Saves the environment and its related resources from great loss. Blocked roads and railway lines, electricity, mobile, andland telephone lines cut, destruction of homes and industries
5.	Business Model (Revenue Model)	Prevents damage of the electrical wires and optical fiber which may cost the government. Reports to the forest department and nearest police station quickly so as to take faster actions
6.	Scalability of the Solution	Computer vision models enable land cover classification and smoke detection from satelliteand ground cameras Automated analysis of firedetection. Improved accuracy rate. Reduced time for computational complexity.