Project Design Phase-1

Proposed Solution Template

DATE	19 September 2022
TEAM ID	PNT2022TMID34027
PROJECT NAME	Emerging methods for early detection of forest fires
MAXIMUM MARKS	2 Marks

Proposed Solution Template:

S.No	Parameter	Description
1.	**Problem Statement**	A Large destructive fire that spread over a forestor area of woodland is a Forest fire that causes loss of humungous amount of Property, Wildlife, Ecosystem and Economy.How to detect these type of fires at early stage and how to control them
2.	**Idea**	1. Various techniques such as watchtowers, spotter planes, infrared, aerial patrols, and automatic detection systems to detect fire events. 2. Educate Everyone on Fire Risks and Safety. 3. Stay with outside fires until they are completely safe and dead out. Dispose of

		wood ashes in a metal bucket, soaking them with water before dumping them 4. Check weather and drought conditions. 5. Check conditions and regulations before you use fireworks or consider safe alternatives. 6. Check conditions and regulations before you use fireworks or consider safe alternatives.

3.	**Novelty**	Sensor technology is an important tool in detecting forest fires by monitoring pressure, humidity, temperature, and chemical parameters. In particular, particulate, carbon dioxide (CO2), and carbon monoxide (CO) sensors are important for detecting wildfire smoke.

4.	**Social Impact**	Blocked roads and railway lines, electricity, mobile and land telephone lines cut, destruction of homes and industries, and the way of life of many communities are annual news stories and the balance of the catastrophe caused by fire results in a wealth of articles, editorials and communications. Forest fires occurs in rural area so it is difficult give awareness to that people Thick smoke from fires can harm animals irritate their eyes and cause difficulty breathing
5.	**Business Model**	Remote sensing-based methods such as satellites, high-resolution static cameras fixed on the ground, and unmanned aerial vehicles (UAVs). Conceptual model of the early forest fire detection system with use of fixed wing and rotary wing UAVs ALTi Transition vertical take-off and landing fixed wing UAV and its ground control station

6.	**Scalability of the Solution**	To further enhance the capability of their application, we recommend these features Provides backup recovery of data Provide better user interface for user.