Project Design Phase-I
Proposed Solution

Date	8 October 2022
Team ID	PNT2022TMID34405
Project Name	Machine Learning-Based Predictive Analytics for Aircraft Engine.
Maximum Marks	2 Marks

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To predict the failure of an engine by using Machine Learning to save loss of time & money thus improving productivity.
2.	Idea / Solution description	Machine learning (ML) is a type of artificial intelligence (AI) that allows software applications to become more accurate at predicting outcomes without being explicitly programmed to do so. The failure can be predicted by installing the sensors and keeping a track of the values.
3.	Novelty / Uniqueness	Gas-turbine engines are critical to the operation of most industrial plants, aircraft, and heavy vehicles such as military armour and transport ships, and their associated maintenance costs can be high.
4.	Social Impact / Customer Satisfaction	Unhappy or disengaged customers naturally mean fewer passengers and less revenue. It's important that customers have an excellent experience every time they travel.

5.	Business Model (Revenue Model)	While safety and performance are the primary goals of aircraft maintenance. Scheduled or preventive work to anticipate and prevent failures. Unscheduled work – Repair maintenance and On-condition maintenance.
6.	Scalability of the Solution	The Scalability calculated by machine learning methods.