AI-Based Applications

① Health care Application

Sl. NO	Application Requirement	Types of Intelligence required
1	Needs to handle clinical data.	Data Handling.
2	Needs to handle images, videos and text patterns.	Knowledge base.
3	Needs to capture symptoms	Sensing
4	Determine the drugs, reactions, and prognosis.	Building and Processing knowledge base.
5	Should deal with more huge Patient data.	Data handling and Analytics.
6	Needs to verify the outcome of medical test.	Uncertainity Handling.
7	Needs to learn the diseases based on clinical data.	Learning Modelling and prediction.
8	Needs to administer the drugs	Actuating

APP2

Agriculture related Application.

S.NO	Application requirement	Type of intelligence required
1	Data on soil characteristics	Machine Learning, Spatial Analysis.
2	Environmental prediction	Data Analysis, Predictive Modeling
3	Variability in output considering soil, environment, seeds & fertilizer characteristics	Machine Learning, Simulation, Casual inference.
4	Learning the quality of seeds & fertilizer required given the environmental conditions & soil characteristics	Reinforcement Learning, Optimization
5	Predicting the changes in environmental conditions & taking corrective actions	Machine Learning, series Analysis.
6	Determining administering pesis to save crops from insecticides.	Image Recognition, knowledge representation
7	Searching simple routes for laying Plants and Cropping	Combinational optimization, Path planning

AM3

Implementing the ROGOLs.

SNO	Application Requirement	Type of intelligence required
1	Object recognition & detection.	visual intelligence
2	Searching for optimum Route constraints like traffic, accidents.	spatial Reasoning, Combinatorial optimization
3	Data on object locations.	semantic Memory, Map Learning.
4	Determine and control the device movements based on local conditions.	Motion planning, control theory.
5	Learning the object interactions.	Reinforcement learning, Imitation Learning
6	sensing ~~Sensing~~ the local Conditions & replanning.	Perception, sensor Fusion
7	Controlling the devices based on traffic conditions.	Predictive Modling, Real-time control

APP 7

Implementing legal systems

SNO	Application requirements	Type of intelligence required
1	Knowledge base on different types of cases & judgement thereon.	Semantic intelligence
2	Finding the best defence given case details.	Strategic intelligence
3	Predicting the variability in judgements given judge characteristics	Analytical intelligence
4	Learning cases and predicting the judgements.	Machine learning intelligence
5	Analysing and correctness of judgements about predicted outcomes.	Critical thinking intelligence.