S.No	Theme	Problem Statement
1	Agriculture/ Food Tech	How might we develop a solution to reduce pesticide and fertilizer usage by integrating Soil Health Card data, weather data, and the Leaf Color Chart method? This app should provide farmers with precise, location-specific recommendations to optimize input usage, enhance crop health, and promote sustainable agricultural practices.
2	Agriculture/ Food Tech	How might we design an affordable device to automatically regulate the temperature in poultry farms, maintaining an optimal 35°C to prevent heat stress, reduce manual water spraying, and ensure the health and productivity of the birds?
3	Agriculture/ Food Tech	How might we develop energy-efficient hybrid interfaces for conventional machines in tea industries, reducing power consumption while maintaining productivity and optimizing overall energy use?
4	Agriculture/ Food Tech	How might we develop an innovative, economical, and user-friendly solution to help farmers prevent bird menace in crops such as sunflower, maize, and jowar? This solution should be practical and scalable, offering an effective method to safeguard these crops while being accessible to farmers.
5	Agriculture/ Food Tech	How can we design a cost-effective, user-friendly automatic mini tilling and leveling machine optimized for heavy clayey soil, reducing operator fatigue and skill requirements, and making it more accessible for small and marginal farmers?
6	Agriculture/ Food Tech	How might we design a cost-effective combined harvester with an integrated precision drying system to efficiently harvest, thresh, and dry paddy grains directly in the field, particularly during the samba season?
7	Agriculture/ Food Tech	How can we innovate a single compact device that can test all necessary qualities of milk, such as FAT, SNF, protein, and adulteration, while also serving as an attractive, modular structure for selling milk and milk products?
8	Agriculture/ Food Tech	How can we design a device to efficiently remove moisture from coir also to prevent groundwater seepage and minimize environmental impact?
9	Agriculture/ Food Tech	How might we develop an efficient shrimp peeling machine that removes shells without compromising yield, accommodates various shrimp sizes, maintains hygienic standards, minimizes processing time, and reduces operational costs to meet growing market demands?

S.No	Theme	Problem Statement
10	Agriculture/ Food Tech	How might we develop advanced infrastructure and mechanization for jaggery production units to improve hygiene and manufacturing processes, while creating a dedicated platform for efficient sourcing and management of jaggery product procurement?
11	Artificial Intelligence	How might we develop an AI or OCR solution to digitize and convert handwritten, old registered documents into a readable and accessible format in regional languages improving public access and readability of historical records?
12	Artificial Intelligence	How might we develop an AI-enabled system for real-time conversion of speech to sign language using animated avatars, ensuring effective communication and inclusivity for persons with hearing and speech impairments during government functions and public events? This solution should eliminate the dependency on sign language experts while providing accurate and accessible communication.
13	Artificial Intelligence	How might we leverage AI technology to identify fish resources and shoals at sea, enabling fishermen to efficiently locate fish with minimal manpower and cost, reducing fuel consumption, and improving catch rates?
14	Artificial Intelligence	How might we build an AI-powered tool to efficiently analyze petitions, categorize them into relevant departments, flag urgent and important cases, and send reminders to officials, while also identifying repetitive grievances and tracking progress until resolution? The tool should also include a feature to communicate the status of the grievance to the petitioner, ensuring transparency and accountability.
15	Artificial Intelligence	How might we develop an integrated device & application that uses technology to monitor a mother's health during pregnancy and the health of the newborn after birth, assigning a unique ID to the child to track progress? The application should support the issuance of birth certificates and other essential documents, ensuring a seamless process from maternal health to early schooling, while capturing relevant health data throughout the child's early years.
16	Artificial Intelligence	How might we develop an integrated solution that provides real-time data to help visitors discover must-visit heritage sites in Tamil Nadu, offering voice-assisted, multilingual insights about the history and significance of these places? This system, powered by an advanced language model (LLM), can enhance the tourist experience by providing personalized, immersive information at iconic locations.

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17	Artificial Intelligence	How might we design an IoT-based self-sustained autonomous solution for the maintenance of public toilets? This system would use sensors for automatic cleaning, odor control, and tracking daily usage to ensure cleanliness and efficient management, improving hygiene and reducing manual intervention.
18	Artificial Intelligence	How can we develop a practical, cost-effective, and eco-friendly AI-driven ultrasound technology to detect and deter wild animals from entering agricultural fields, while studying the movement of animals from reserve forests to human habitation areas and implementing a warning system to alert nearby localities for effective crop protection and wildlife management?
19	Artificial Intelligence	How might we be able to develop and implement an AI-powered traffic management system that aims to achieve a Zero Violation Point, ensuring optimal and efficient traffic flow while minimizing violations and enhancing overall road safety. This should be able to track the riders without helmets, seatbelts issuing challans for violations - a integrated system with less complexity that should be implementable
20	Artificial Intelligence	How might we develop an AI-powered energy management system that optimizes energy consumption in industrial and commercial facilities, reducing costs, improving efficiency, and minimizing environmental impact through real-time analytics and automation?
21	Artificial Intelligence	How might we Develop an integrated solution leveraging GIS-based tools, remote sensing, AI, and an online platform to identify suitable locations for shelter belt plantations, predict erosion-prone zones, monitor changes in shelter belt density, and facilitate carbon accounting, with the overarching goal of mitigating coastal erosion, strengthening coastal defenses, and contributing to climate resilience
22	Clean, Green & Renewable Energy	How might we create an effective and sustainable solution to reuse or recycle worn-out solar panels and E-Vehicle batteries, minimizing waste and maximizing the recovery of valuable materials for future use?
23	Clean, Green & Renewable Energy	How might we develop a system where the temperature and humidity of perishable goods be monitored during transportation and storage to ensure product quality and minimize spoilage in the food processing industry?

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24	Climate Change/ Disaster management	How might we develop a cost-effective and innovative solution to retrofit efficient drainage systems within existing cramped infrastructure, addressing the challenges of poor urban planning, inadequate drainage, and unfavorable geographical conditions, while mitigating the impacts of rapid urbanization and recurring flooding?
25	Climate Change/ Disaster management	How might we design alternative biodegradable, non-reactive, and non-leachable food containers for packing liquid food items in hotels and restaurants, ensuring sustainability, safety, and consumer health while reducing environmental impact?
26	Climate Change/ Disaster management	How might we develop a life detector that accurately identifies human presence under soil during landslides, minimizing false positives and improving rescue efficiency by distinguishing humans from other living creatures?
27	Climate Change/ Disaster management	How might we develop and compact cooling technologies for small buildings and industries to reduce the environmental impact of air-conditioning systems, particularly in heat-prone coastal areas?
28	Construction/ Building Technology	How might we develop advanced, non-flammable, and lightweight construction materials for the fireworks industry to improve safety, prevent fire hazards, and maintain structural integrity and efficiency in the production environment?
29	Construction/ Building Technology	How can we develop a system that offers suitable building designs for residential houses in hill stations, considering factors such as land slope, soil type, and construction materials, to speed up the approval process while ensuring compliance, reducing delays, and not compromising users' needs?
30	Information/Communication Technology	Design and develop a comprehensive Learning Management System (LMS) that seamlessly integrates individual user logins, course enrolment, attendance tracking, learning pathways, assessments, evaluations, and certification management, all within a unified and intuitive centralized dashboard.
31	Information/Communication Technology	How might you create a user-friendly software solution to map government schemes to beneficiaries based on their socio-economic background? Ensure real-time access and a citizen-centric design for efficient grievance redressal.

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32	Information/Communication Technology	How might we design a robust online registration system that ensures the seller's willingness is captured transparently and securely during faceless registrations, preventing future claims of coercion in signing documents or providing fingerprints? The solution should integrate innovative measures, such as video consent verification, digital signature authentication, or AI-based sentiment analysis, to confirm voluntary participation while maintaining efficiency and trust in the process.
33	Information/Communication Technology	How might we develop a unique and efficient mechanism to automatically stop the transfer of social security funds to deceased under various schemes? The solution should ensure timely identification of deceased beneficiaries, leveraging integration with death registration databases, Aadhaar authentication, or periodic life certification through digital methods to prevent misuse and save government funds.
34	Information/Communication Technology	How might we develop an image processing solution to automatically capture and verify Aadhar and smart card details, ensuring accurate identification of genuine borrowers for government loan waivers, while eliminating clerical errors and time constraints?
35	Information/Communication Technology	How might we design and implement a reliable, cost-effective safety system for tribal communities in remote mountainous regions, which detects wild animal threats and provides early alerts? How can we ensure seamless communication infrastructure that enables these communities to connect with the outside world during emergencies, allowing them to share vital information and access assistance in real-time?
36	Information/Communication Technology	How might we simplify the approval process by creating a single-window platform that allows entrepreneurs to easily obtain all necessary approvals from various government agencies, reducing delays and improving efficiency?
37	Information/Communication Technology	How might we develop a versatile and dynamic website with unique ID numbers to efficiently address migrant labor issues in Tamil Nadu, enabling smooth registration, tracking, and providing timely support to migrant workers while ensuring ease of use and accessibility?
38	Information/Communication Technology	How might we create a centralized dashboard for district administration to monitor and track the real-time progress of work across all departments, ensuring efficient management and decision-making?

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39	Information/Communication Technology	How might we create accessible VR and AR-based tools to enhance hands-on, industry-relevant training for students? The "VR-AR: Bridging the Skills Gap" challenge focuses on integrating immersive learning modules into the academic curriculum, tracking student progress and feedback. This initiative aims to bridge the skills gap by offering practical, engaging, and industry-relevant training across various trades. vocational training more practical, engaging, and industry-relevant, ultimately bridging the skills gap for future industrial workers.
40	Information/Communication Technology	How might we develop a smart, economical solution to digitize and monitor the growth measurements (height and weight) of children, track attendance without overburdening server space, and improve ICDS enrollment by attracting public engagement in Anganwadi services?
41	Information/Communication Technology	How might an innovative solution address communication challenges in remote areas, such as hilly and forest regions with weak or no network coverage? The goal is to develop an affordable and accessible emergency communication system, considering that satellite phones are financiallyunfeasible for most of the population.
42	Information/Communication Technology	How might we develop a centralized digital platform to connect all PHCs, Upgraded PHCs, and Sub-Centres with the Deputy Director of Health Services (DDHS), enabling real-time monitoring of doctor attendance, healthcare services, and automated absenteeism alerts to improve healthcare delivery across divisions?
43	Information/Communication Technology	How might we develop an automated, AI-powered, and cost-effective solution to ensure the consistent production of high-quality M-Sand, improving safety, durability, and construction standards while maintaining profitability for quarry owners?
44	Information/Communication Technology	How might we develop an online platform to ensure the safety and mental well-being of children and women by integrating virtual counseling services, gamified activities, awareness on legal rights and access, and essential resources? This platform would create a secure and engaging virtual environment, empowering users with interactive tools, mental health support, and knowledge to enhance their safety and overall well-being.
45	Information/Communication Technology	How might we develop a solution for MSMEs in remote locations effectively track inventory, minimize stockouts, and optimize logistics to ensure timely deliveries?
46	Information/Communication Technology	How might we develop a solution to combat the theft of ration goods during transportation from godowns to PDS shops, while ensuring the enforcement of stock clearance on a FIFO (First-In, First-Out) basis for better inventory management and accountability?

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47	Information/Communication Technology	How might we implement a GPS-based tracking system for government buses that provides passengers with real-time arrival updates, seat availability, and route information (starting and ending points), ensuring clarity, safety, and convenience at all times? This system should enhance the passenger experience by offering accurate tracking, real-time updates, and timely information for improved planning and safety.
48	Information/Communication Technology	How might we create a mobile health application that enables remote monitoring and telemedicine services for patients with chronic diseases, improving accessibility, convenience, and timely care?
49	Information/Communication Technology	Develop innovative assistive technologies and inclusive infrastructure to empower visually impaired individuals with enhanced navigation, mobility, and independence, thereby improving their social interaction and overall quality of life.
50	Information/Communication Technology	How can we create an advanced agricultural bot with multi-language support and animation that helps small-scale farmers with soil testing, pest detection, crop management, irrigation, and harvesting, while providing information on local government financial aids, farming schemes, and subsidies, to improve productivity, income, and food security, and double agricultural output?
51	Information/Communication Technology	How might we develop a solution for automating inventory management in small warehouses, including real-time stock tracking, automated order fulfilment, and minimising human error?
52	Information/Communication Technology	How might we develop a mobile app that tracks and displays district-level officials' field visits and inspections with geo-tagging, allowing HODs and district collectors to review work, upload photos, and digitally sign inspection reports using mobile fingerprint/OTP authentication?
53	Information/Communication Technology	How might we develop a solution for connecting farmers with local markets, enabling real-time price discovery, efficient supply chain management, and fair pricing for agricultural produce.
54	Med Tech/ Bio Tech/ Health Tech	How might we design a system to monitor the overall operations of a government hospital to monitor and provide real-time data on all aspects of patients admitted into the hospital and outpatients
55	Med Tech/ Bio Tech/ Health Tech	How might we develop a system to monitor the availability, utilization, and weekly requirements of medicines in dispensaries, hospitals, clinician centers, and polyclinics to ensure efficient supply and management?
56	Med Tech/ Bio Tech/ Health Tech	How might we design an automated drug dispenser to streamline the distribution of medications in hospitals, reducing patient waiting times, minimizing congestion, and optimizing pharmacist workloads during peak outpatient hours?

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57	Med Tech/ Bio Tech/ Health Tech	How might we develop an app to efficiently maintain and access medico-legal records, reducing search time and manpower required for record management while ensuring easy retrieval and organization of data?
58	Med Tech/ Bio Tech/ Health Tech	How might we develop an automatic self-cleaning toilet system with UV disinfection, hot air drying, water-saving features, and real-time tracking of nearby available toilets for enhanced hygiene and convenience?
59	Med Tech/ Bio Tech/ Health Tech	How might we develop a solution using techno-scientific tools to reduce the particulate matter (SPM) emissions from cement plants in Ariyalur district, ensuring improved public health and environmental safety?
60	Robotics/ Drone/ Industry 4.0	How might we develop a GIS-based solution for automating the approximate assessment of property tax? This system would streamline the process and enhance accuracy in property valuation for tax purposes, ensuring more efficient and transparent tax management.
61	Robotics/ Drone/ Industry 4.0	How can we design an economical device, such as robotic boats, to efficiently collect plastic waste in marine ecosystems and integrate anti-pollutant technologies to protect and sustain the marine environment?
62	Robotics/ Drone/ Industry 4.0	How can we develop an effective device combining drone surveys and a modernized aquatic weed harvester to efficiently remove water hyacinth from water bodies?
63	Rural & Urban development/ Manufacturing/ Engineering Technology	How might you develop a cost-effective, time-bound construction model for rural housing schemes? Solve challenges like outdated methods, budget limits, narrow lanes, delays, and quality concerns to benefit beneficiaries.
64	Rural & Urban development/ Manufacturing/ Engineering Technology	How might we design cost-effective, lightweight, and durable safety equipment for sanitary workers, ensuring comfort and protection for women and the elderly in our state's hot, humid climate?
65	Rural & Urban development/ Manufacturing/ Engineering Technology	How might we automate rural water supply systems with IoT-based controls, smart metering, and real-time monitoring of tank levels and water quality to ensure equitable, efficient, and sustainable distribution?

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66	Rural & Urban development/ Manufacturing/ Engineering Technology	How might we design an effective safety mechanism using proximity sensors with alarm systems to prevent children from falling into uncovered borewell holes/ open drainage pits, addressing this recurring and critical safety concern? This technology should detect movement within a 1-foot radius of an uncovered borewell and trigger an audible alert, ensuring timely intervention and enhanced safety
67	Rural & Urban development/ Manufacturing/ Engineering Technology	How might we develop a system to identify water leakage, detect unauthorized connections, prevent illegal water siphoning through motors, and monitor pressure levels at the tail end of the water supply distribution main?
68	Rural & Urban development/ Manufacturing/ Engineering Technology	How might we design a compact, cost effective device to efficiently clear long sewage canals and remove stagnated water, improving drainage flow and preventing blockages in the sewage system?
69	Rural & Urban development/ Manufacturing/ Engineering Technology	How might we design a cost-effective device to remotely operate heavy-duty motors at water pumping stations, monitor water levels in overhead tanks (OHT), and ensure efficient operation while also providing timely cleaning notifications and detecting electrical phase imbalances, dry runs, and overload conditions? This device should offer real-time monitoring, automated alerts, and remote control capabilities to enhance operational efficiency and prevent damage.
70	Rural & Urban development/ Manufacturing/ Engineering Technology	How might we design a system that integrates POS machines with electronic weighing machines at ration shops to ensure the correct weighment of public distribution commodities? This integration would automate billing, ensuring accurate distribution of items like rice, sugar, and wheat. The process can be monitored through a centralized dashboard by the Tamil Nadu Civil Supplies Corporation for transparency and accountability.
71	Rural & Urban development/ Manufacturing/ Engineering Technology	How might we design a feasible solution to install lightning arresters in explosive areas of fireworks industries, ensuring the safety of workers and the facility while maintaining compliance with industry regulations? The solution should be cost-effective, easy to implement, and capable of minimizing the risk of accidents due to lightning strikes.
72	Rural & Urban development/ Manufacturing/ Engineering Technology	How might we design affordable and effective protective equipment, that can be easily integrated with conventional machinery in small industries to prevent accidents and improve worker safety?

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73	Rural & Urban development/ Manufacturing/ Engineering Technology	How might we design and develop low-cost, fully automated machinery for manufacturing Athangudi tiles, enhancing production efficiency, reducing costs, and improving the livelihoods of local entrepreneurs while preserving traditional craftsmanship?
74	Rural & Urban development/ Manufacturing/ Engineering Technology	How might we design a puncture-proof, abrasion-resistant water or air-filled bag capable of supporting more than 100 kg of animal weight to help elevate downer or pregnant animals, facilitate recovery, and improve their mobility?
75	Smart Education/ Edu-Tech/ Skill Development	How can we develop an accessible platform for visually and hearing-impaired students, integrating sign language and visual aids to enhance accessibility and comprehension?
76	Smart Education/ Edu-Tech/ Skill Development	How might we develop an easy-to-use tool that combines psychometric analysis and activity-based assessments to provide personalized career guidance for school children?
77	Solid Waste/ Bio-waste/ E-waste	How might we design a cost-effective, compact, and user-friendly device to help households easily segregate wet and dry waste, improving source segregation, recycling efficiency, and reducing environmental impact at the ward level?
78	Solid Waste/ Bio-waste/ E-waste	How might we develop a technology to manage and reduce the accumulation of poultry litter, preventing the emission of greenhouse gases like ammonia and H2S, while mitigating foul smells and fly infestations?
79	Solid Waste/ Bio-waste/ E-waste	How might we implement an automated solid waste management system to detect when drainage in a street remains uncleaned beyond a threshold period and promptly alert the district administration? This solution could utilize IoT sensors, AI-driven monitoring, or real-time data analytics to ensure timely intervention, prevent blockages, and maintain hygiene standards in the community.
80	Solid Waste/ Bio-waste/ E-waste	How might we develop a solution for industrial effluent and heavy metal reclamation using bio-agents and bio-products like Effective Microorganisms (EM Solution), incorporating natural beneficial organisms to restore soil and water quality?
81	Solid Waste/ Bio-waste/ E-waste	How might we design a self-sustaining, autonomous device that efficiently converts food waste and bio-waste into valuable end products while minimizing human intervention and maximizing resource recovery?

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82	Solid Waste/ Bio-waste/ E-waste	How might we design a system to monitor and track the illegal disposal of meat waste, particularly incidents of cross-border dumping? The solution should help prevent these activities, enable tracking of waste disposal post-seizure by local authorities, and ensure prompt action to address these environmental risks, protecting public health and the ecosystem.
83	Solid Waste/ Bio-waste/ E-waste	How might we develop a sustainable solution to reuse or recycle scrap generated in the rubber industry (such as from manufacturers of caskets, bushes, and other rubber components) to minimize waste and promote resource efficiency?
84	Solid Waste/ Bio-waste/ E-waste	How might we develop a solution for manufacturing companies minimize industrial waste, improve recycling processes, and ensure compliance with environmental standards?
85	Transportation/ Logistics/ Smart Vehicles	How can we develop a solution to address frequent accidents in high-risk areas of ghat roads, where sharp turning radii and steep slope angles contribute to the hazards?