Section 5: Research, Innovation, and Extension

5.5   Patents, Innovations, and Start-ups :

PATENTS/BOOKS/PROJECTS:

S.No	Department	Title	Name of the author/s	Type of work	Incentive
1	CSE	AI Health Monitoring device	Dr.P.Harini	Granted Patent	5000
2	CSE	Automated Accident Severity Detection Using Integrated Machine Learning and Deep Learning Algorithms	Dr.P.Harini	Patent	2000
3	CSE	A Federated Approach for Integrating Digital HealthCare in Hospitality Management	Dr.P.Harini	Patent	2000
4	CSE	Medical Robotics and Automation for Surgery and Patient Care using AI	Dr. Ratna Raju Mukiri	Patent	2000
5	CSE	Artificial intelligence based anesthesia machine	Dr. Ratna Raju Mukiri	Patent	1000
6	CSE	Adaptive A3C-Based Residual Recurrent Neural Network System for Dynamic Task Scheduling inUncertain Edge-Cloud Computing Environments	Dr.Nagesh Babu	Patent	1000
7	CSE	Privacy-Preserving Machine Learning Models for HealthCare Data Using Homomorphic Encryption	Mr. N.Lakshmi Narayana	Patent	1000
8	CSE	Medical Robotics and Automation for Surgery and Patient Care using AI	Mr.Balaji Babu Pannem	Patent	1000
9	EEE	System And Method for Real-Time Detection and Prevention of Accidents Involving Large Animals or Objects in Critical Zones	Dr.S.AntonyRaj	Patent	1000
10	ECE	AN IOT-ENABLED HIGH-GAIN ANTENNA SYSTEM FOR ENHANCED 5G COMMUNICATION NETWORKS	Dr. B. Kiran Kumar	Patent	1000
11	ECE	System For Decentralized IOT Ecosystem Enabling Secure and Scalable Communication	Dr. B. Kiran Kumar	Patent	1000
12	ECE	Breath Analyzer	Dr. B. Kiran Kumar	Granted Patent	2500
13	ECE	Wearable Cardiac ECG Signal Recording Device	Dr. B. Kiran Kumar	Granted Patent	2500
14	ECE	Smart Medical Image Processing System Using Deep Learning	Dr.D.Rajendra Prasad	Patent	1000

15	ECE	A System for VLSI Layout Optimization in Connected and Pyramid Networks Using Deep Learning	Dr.D.Rajendra Prasad	Patent	1000
16	ECE	Interactive tool for MIMO System Optimization in Next-Gen Networks	Dr.D.Rajendra Prasad	Granted Patent	2500
17	ECE	Power-Efficient VLSI Design: Strategies for Low-Power Applications	Dr.D.Rajendra Prasad	Book	1250
18	ECE	AI-Integrated Edge Computing Device	Dr. R.V.S Harish	Patent	2500
19	CSE-DS	Blockchain-Powered Lightweight Security Protocols for IoE Ecosystems	Dr. K. Subbarao	Patent	2000
20	ME	Alloy Mixing and Casting Machine	Dr. T. Gopala Rao	Granted Patent	2500
21	ME	A System Automated Network Security Management with generative AI-Driven Response Mechanisms	Dr. T. Gopala Rao	Patent	1000
22	ME	Advanced non-conventional Machining Processes	Dr. T. Gopala Rao	Book	1250
23	ME	Computer Aided Engineering graphics	Dr. T. Gopala Rao	Book	2500
24	ME	A Smart Natural Fiber Composite with Self-Healing Capabilities and Method Thereof	Mr. P. Harish	Patent	1000
25	ME	Automatic Headlight Beam Controller for Vehicles	Dr. M. Suresh Kumar	Granted Patent	2500
26	ME	Nanostructures Materials for Enhanced Mechanical Properties	Dr. M. Suresh Kumar	Granted Patent	2500
27	ME	Additive Manufacturing System and Method for Multi-Material Composite Structure Fabrication	Dr. M. Suresh Kumar	Patent	1000
28	CIVIL	Eco-Friendly Concrete Compositions for Sustainable Infrastructure Development	Dr. T. Kiran Kumar	Patent	1000
29	MBA	Deep Learning Techniques for Predicting Student Graduation in Higher Education Based on Academic Performance	Dr. R. Emmaniel	Patent	1000
30	MBA	Outcome-Based Curriculum Design: An Open-Source Framework Integrating Pedagogy and Machine Learning for Quality Education	Dr. R. Emmaniel	Patent	1000
31	MBA	Enhancing Student Learning	Dr. R. Emmaniel	Patent	1000

		Outcome Prediction in Higher Education Using Machine Learning			
32	H &S	Adaptive Ai-Based System for Personalized English Language Learning and Proficiency Assessment	Dr. R. N. D Lakshmi	Patent	1000
33	H &S	Method For Contextual Language Processing and Real-Time Grammar Correction in English Texts	Dr. R. N. D Lakshmi	Patent	1000
34	H &S	Automated Contextual Understanding and Idiom Translation in English Language Processing	Dr. R. N. D Lakshmi	Patent	1000
35	AIML	Computer Networks, Cryptography and Information Security	Dr Hari Kishan Chapala	Book	2500
36	CSE-IOT	AI- Powdered detection of sarcasm in digital conversations	Dr V V Praveen Kumar	Patent	1000
37	CSE-IOT	Analysing a century of civil aviation accidents patterns,trends and safety	Dr Indraneel Sreeram	Patent	1000
38	ECE	Advanced machine learning approaches for early detection of breast cancer and associated therapeutic challenges	Dr G Srinivasarao	Patent	1000
39	ECE	INTELLIGENT ANOMALY DETECTION SYSTEM USING DEEP LEARNING FOR IOT-BASED SMART HEALTHCARE NETWORKS	Dr R V S Harish	Patent	1000
40	ECE	Adaptive Noise Reduction Device for Biomedical Signal Processing	Dr R V S Harish	Design Patent	2500
41	ME	Additive Manufacturing System and Method for Multi-Material Composite Structure Fabrication	Dr. M. Suresh Kumar	Patent	1000
42	ME	Turbocharged Internal Combustion Engine System with Adaptive Fuel-Air Mixture Optimization For Enhanced Efficiency and Emissions Control	Dr. M. Suresh Kumar	Patent	1000
43	ECE	Design and analysis of Quasi-binomial series array antenna for millimetre ware for 5G applications	Dr P Srinivasa Rao	Patent	1000
44	MBA	Sales and Advertising Equipment, Signs(Signs,	Dr.S.Chand Basha	Patent	2500

		Signboards and Advertising Devices)			
45	MBA	Device for financial analysis of customers online data	Dr. S. Chand Basha	Patent	2500
46	CIVIL	Concrete Technology	Dr. D. Jyothi Swarup	Book	1250
47	CIVIL	Modular Interlocking Construction System For Rapid and Sustainable Assembly	Dr. D. Jyothi Swarup	Patent	1000
48	CIVIL	Prefabricated Modular BuildingComponents and System for Rapid Construction	Dr. D. Jyothi Swarup	Patent	2000
49	ECE	Vision based road pattern recognition device using conventional image processing	Dr. B. Kiran Kumar	Patent	2500
50	ECE	Multimedia Data Processing and Analysis in IoT	Dr. D. Rajendra Prasad	Book chapter in Multimedia Technologies in the Internet of Things Environment	1250
51	CIVIL	Energy-Efficient HVAC System for Civil Engineering applications	Dr. G. Vijay Kumar	Patent	1000
52	CIVIL	Integrated Traffic Management System for enhanced coordination in Civil Engineering Projects	Mr. Ch. Pavan Kumar	Patent	2000
53	CIVIL	Waste water treatment and air pollution control in industries	Dr. G. Vijay Kumar	Book	2500
54	CIVIL	Digital Soil Mapping Device	Dr. G. Vijay Kumar	Patent	5000
55	CIVIL	AI-Powered WeatherSurveillance Device	Dr. G. Vijay Kumar	Patent	2500
56	CIVIL	Concrete Surface Degradation Monitoring Device	Mr. L.V Pavan Kumar	Patent	2500