

| Details of Minor Project 2019-23 |                     |             |                 |  |   |                  |                       |
|----------------------------------|---------------------|-------------|-----------------|--|---|------------------|-----------------------|
| S.No.                            | Mentor Name         | Roll No.    | Student's Name  | Project Title  | POs   | PSOs             | SDG                   |
| 1                                | Prof. Sunil Mathur  | 20314802819 | Khyati Sharma   | Brain Tumor Dectection                                       | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO10, PO12  | PSO1, PSO2, PSO3 | SDG 3, SDG 4, SDG 9   |
| 2                                |                     | 20714802819 | kapil goel      |  |   |                  |                       |
| 3                                |                     | 20614802819 | harshit gupta   |  |   |                  |                       |
| 4                                |                     | 814802819   | MAYANK CHANDRA  | Surveillance Drone design research                           | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO11, PO12 | PSO1, PSO2       | SDG 9, SDG 11, SDG 16 |
| 5                                |                     | 1714807320  | VIPUL VAIBHAV   |  |   |                  |                       |
| 6                                |                     | 214807320   | AMAN BISHT      |  |   |                  |                       |
| 7                                | Dr. Navneet Yadav   | 22814802819 | Rishik Sharma   | Number plate dectection system                               | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO10, PO11, PO12 | PSO1, PSO2       | SDG 9, SDG 11, SDG 16 |
| 8                                |                     | 22214802819 | Ankit Aggarwal  |  |   |                  |                       |
| 9                                |                     | 20914802819 | Vicky Aggarwal  | Brain Tumor ml based   | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO10, PO12       | PSO1, PSO2, PSO3 | SDG 3, SDG 4, SDG 9   |
| 10                               |                     | 21114802819 | Dhruv Mahajan   |  |   |                  |                       |
| 11                               |                     | 20514802819 | Satvik Mansotra |  |   |                  |                       |
| 12                               | Dr. R. K. Choudhury | 5414802819  | Prerit Goyal    | full adder using 14 CNFET                                    | PO1, PO2, PO3, PO4, PO5, PO7, PO10, PO12            | PSO1, PSO2       | SDG 9, SDG 12         |
| 13                               |                     | 1514802819  | Keshav Kant     |  |   |                  |                       |
| 14                               |                     | 9914802819  | Rajneesh Mishra |  |   |                  |                       |
| 15                               |                     | 11814802819 | Rishabh Sharma  | Drivers real time safty and accident prevention Assistant    | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO10, PO12  | PSO1, PSO2, PSO3 | SDG 3, SDG 9, SDG 11  |
| 16                               |                     | 12514802819 | Rijul Sharma    |  |   |                  |                       |
| 17                               |                     | 14414802819 | Anchal Garg     | Attendance Management System (Using Face Recognition)        |   |                  |                       |
| 18                               | Dr. Nitin Sharma    | 21614802819 | Pragya Jha      | Application of medical Image processing for Cancer detection | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO10, PO12  | PSO1, PSO2, PSO3 | SDG 3, SDG 4, SDG 9   |
| 19                               |                     | 22014802819 | Vishi Aggarwal  |  |   |                  |                       |
| 20                               |                     | 36314802819 | Chahat Goel     |  |   |                  |                       |
| 21                               |                     | 714807320   | Gopal Jha       | AI base Personal Assistant                                   | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO10, PO11,      | PSO1, PSO2       | SDG 4, SDG 9, SDG 11  |
| 22                               |                     | 314807320   | Atul Rai        |  |   |                  |                       |

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| 23 |                           | 614807320   | Gagan Mittal      |   | PO12  |  |                             |                     |
| 24 |                           | 20114802819 | Prateek Verma     | Network intrusion Detection System using machine learning                     | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO10, PO11, PO12 | PSO1, PSO2, PSO3                                   | SDG 9, SDG 11, SDG 16       |                     |
| 25 |                           | 20214802819 | Rishabh Sharma    |   |   |  |                             |                     |
| 26 | <b>Mr. Ajay Gupta</b>     | 10014802819 | Bhavya Jain       | Image and text steganography  | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO10, PO12       | PSO1, PSO2   | SDG 9, SDG 16               |                     |
| 27 |                           | 14314802819 | Ritika Maheshwari |   |   |  |                             |                     |
| 28 |                           | 13314802819 | Priyanshu Gupta   | Image Enhancement method considering both dyanamic range and colour constancy | PO1, PO2, PO3, PO4, PO5, PO10, PO12                 | PSO1, PSO2   | SDG 9, SDG 12               |                     |
| 29 |                           | 8014802819  | Shubham Jain      |   |   |  |                             |                     |
| 30 |                           | 7014802819  | Samarth Khatri    |   |   |  |                             |                     |
| 31 |                           | 3714802819  | Kshitij Ranjan    |   |   |  |                             |                     |
| 32 | <b>Mr. P.K. Chaudhary</b> | 6914802819  | Prabhakar         | Traffic Signal Optimization   | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO11, PO12 | PSO1, PSO2   | SDG 9, SDG 11, SDG 13       |                     |
| 33 |                           | 914802819   | Siddharth Parmar  |   |   |  |                             |                     |
| 34 |                           | 14514802819 | Nikhil Choudhary  |   |   |  |                             |                     |
| 35 |                           | 35714802819 | Chirag kansal     | Extraction of Notes from music  | PO1, PO2, PO3, PO4, PO5, PO10, PO12                 | PSO1, PSO2   | SDG 4, SDG 9                |                     |
| 36 |                           | 2214802819  | Aalisha Sinha     |   |   |  |                             |                     |
| 37 |                           | 13914802819 | Devanshi Gupta    |   |   |  |                             |                     |
| 38 |                           | 10114802819 | Shrey Gupta       |   |   |  |                             |                     |
| 39 | <b>Ms. Kanika Agarwal</b> | 9614802819  | Devanshu Agrawal  | Facial emotion Detection using deep learning                                  | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO10, PO12       | PSO1, PSO2   | SDG 3, SDG 4, SDG 9, SDG 16 |                     |
| 40 |                           | 514802819   | Ayush Gupta       | Heart disease predication using machine learning                              | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO10,       | PSO1, PSO2,  | SDG 3, SDG 4, SDG 9         |                     |
| 41 |                           | 1214802819  | Ankush Goyal      | Crop yield prediction using machine learning                                  | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO12       | PSO1, PSO2   | SDG 2, SDG 9, SDG 12,       |                     |
| 42 |                           | 1314802819  | Aryan Gupta       | Heart disease predication using machine learning                              | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO10, PO12  | PSO1, PSO2, PSO3                                   | SDG 3, SDG 4, SDG 9         |                     |
| 43 |                           | 21314802819 | Rishu Raj         | Facial emotion Detection using deep learning                                  | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO10, PO12       | PSO1, PSO2   | SDG 3, SDG 4, SDG 9, SDG 16 |                     |
| 44 |                           | 8314802819  | Pranav Batra      |   |   |  |                             |                     |
| 45 |                           |             | 36214802819       | Janhavi Gautam  | Heart disease predication using machine learning    | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO10, PO12 | PSO1, PSO2, PSO3            | SDG 3, SDG 4, SDG 9 |

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| 46 |                         |             |                  |  |   |                  |                              |
| 47 | <b>Dr. Rajni</b>        | 3514802819  | Yash Aggarwal    | Crop yield prediction using machine learning                     | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO12       | PSO1, PSO2       | SDG 2, SDG 9, SDG 12, SDG 13 |
| 48 |                         | 3014802819  | Harsh Jetly      |  |   |                  |                              |
| 49 |                         | 13414802819 | Yatin Khandelwal |  |   |                  |                              |
| 50 |                         | 3914802819  | Ayush Goel       | Feel The virtual   | PO1, PO2, PO3, PO4, PO5, PO6, PO10, PO11, PO12      | PSO1, PSO2       | SDG 4, SDG 9, SDG 11         |
| 51 |                         | 9714802819  | Parth Babbar     |  |   |                  |                              |
| 52 |                         | 12714802819 | Shubh Saxena     |  |   |                  |                              |
| 53 | <b>Ms. Shalu</b>        | 13014802819 | DAVAURIYA        | Water level indicator / sensor                                   | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO12       | PSO1, PSO2       | SDG 6, SDG 9, SDG 12         |
| 54 |                         | 14214802819 | SHEKHAR          | Designing a circularly polarized path antenna                    | PO1, PO2, PO3, PO4, PO5, PO7, PO10, PO12            | PSO1, PSO2       | SDG 9, SDG 12                |
| 55 |                         | 414807320   | Chirag Sharma    |  |   |                  |                              |
| 56 |                         | 36714802819 | Akshita Bansal   | Water level indicator / sensor                                   | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO12       | PSO1, PSO2       | SDG 6, SDG 9, SDG 12, SDG 13 |
| 57 |                         | 22414802819 | Shivam Pruthi    |  |   |                  |                              |
| 58 |                         | 22614802819 | Samar Gupta      |  |   |                  |                              |
| 59 | <b>Dr. Anamika Jain</b> | 1114802819  | Aditi Gupta      | Breast cancer prediction using machine learning                  | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO10, PO12  | PSO1, PSO2, PSO3 | SDG 3, SDG 4, SDG 9          |
| 60 |                         | 2714802819  | Sanchit Aggarwal |  |   |                  |                              |
| 61 |                         | 21514802819 | Mohit Kumar      | Sign Language Translator and Emotion Predictor                   | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO9, PO10, PO12  | PSO1, PSO2, PSO3 | SDG 3, SDG 4, SDG 9, SDG 10  |
| 62 |                         | 21414802819 | Aniket           |  |   |                  |                              |
| 63 |                         | 22714802819 | Sudhanshu Mishra |  |   |                  |                              |
| 64 | <b>Dr. Rohit Rana</b>   | 22314802819 | Saksham mittal   | cancerous cell detection   | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO10, PO12  | PSO1, PSO2, PSO3 | SDG 3, SDG 4, SDG 9          |
| 65 |                         | 4914802819  | Pulkit singhal   |  |   |                  |                              |
| 66 | <b>Dr. Javed Ahmed</b>  | 2414802819  | utkarsh gupta    | Detection of slow learner students & improving learning outcomes | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO10, PO11, PO12 | PSO1, PSO2, PSO3 | SDG 4, SDG 9, SDG 10         |
| 67 |                         | 2014802819  | akash sharma     |  |   |                  |                              |
| 68 |                         | 2314802819  | naman batra      |  |   |                  |                              |
| 69 |                         | 21814802819 | Parul Kohli      | Dermatological diseases detection using machine learning         | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO10, PO12  | PSO1, PSO2, PSO3 | SDG 3, SDG 4, SDG 9          |
| 70 |                         | 21214802819 | Anish Tiwari     |  |   |                  |                              |
| 71 |                         | 21714802819 | Sresth Anand     |  |   |                  |                              |

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| 72 | <b>Dr. Divya Goyal</b> | 22514802819 | prayas agarwal       |  |   |                  |                              |
| 73 |                        | 20814802819 | Himanshu Raj         | Medical Image analysis using Machine Learning  | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO10, PO12  | PSO1, PSO2, PSO3 | SDG 3, SDG 4, SDG 9          |
| 74 |                        | 20914802819 | Satvik Mansotra      |  |   |                  |                              |
| 75 |                        | 22114802819 | Shivang Bansal       |  |   |                  |                              |
| 76 |                        | 14814802819 | Manish Singh Rawat   | FPGA Implementation of RTL Designs   | PO1, PO2, PO3, PO4, PO5, PO7, PO10, PO11, PO12      | PSO1, PSO2       | SDG 9, SDG 12                |
| 77 |                        | 13614802819 | Shaun Miguel Roberts |  |   |                  |                              |
| 78 | <b>Dr. S. K. Kundu</b> | 2814802819  | Tanmay Singhal       | Design,simulation and performance analysis of gate all around mosfet as a biosensor                                      | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO12       | PSO1, PSO2       | SDG 3, SDG 9, SDG 12         |
| 79 |                        | 2914802819  | Anubhav Arora        |  |   |                  |                              |
| 80 |                        | 4214802819  | Parshv Jain          |  |   |                  |                              |
| 81 |                        | 5114802819  | NITIN JHA            | Design,simulation and analysis of dual material surrounding split gate mosfet as biosensor.                              | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO12       | PSO1, PSO2       | SDG 3, SDG 9, SDG 12         |
| 82 |                        | 10214802819 | PULKIT MISHRA        |  |   |                  |                              |
| 83 |                        | 13114802819 | ABHINEET KR THAKUR   |  |   |                  |                              |
| 84 | <b>Dr. Anubha Goel</b> | 6514802819  | AYUSH GROVER         | Floor cleaning robot with mobile app or Autonomus  | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO11, PO12 | PSO1, PSO2       | SDG 3, SDG 9, SDG 11, SDG 12 |
| 85 |                        | 7414802819  | CHANDERPAL           |  |   |                  |                              |
| 86 |                        | 15014802819 | SADASHIV JHA         |  |   |                  |                              |
| 87 |                        | 36114802819 | Harshit Sahni        | Hydrogen gas sensor using mofet  | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO12       | PSO1, PSO2       | SDG 3, SDG 7, SDG 9, SDG 12, |
| 88 |                        | 36514802819 | Sanchit              |  |   |                  |                              |
| 89 | <b>Mr. Amit Saxena</b> | 2514802819  | Shruti Jain          | Literature review of randomx proof of work stamping alogorithm for multicore android smart phone processors using ternux | PO1, PO2, PO3, PO4, PO5, PO6, PO10, PO11, PO12      | PSO1, PSO2       | SDG 4, SDG 9, SDG 12         |
| 90 |                        | 35514802819 | Arshia Vashisht      |  |   |                  |                              |
| 91 |                        | 14014802819 | Joyesh Banerjee      |  |   |                  |                              |
| 92 |                        | 6314802819  | Saransh Gupta        | Arithmetic square no. generator circuit for 4 bit binary no  | PO1, PO2, PO3, PO4, PO5, PO10, PO12                 | PSO1, PSO2       | SDG 4, SDG 9                 |
| 93 |                        | 13214802819 | Vinay Kumar Sharma   |  |   |                  |                              |
| 94 |                        | 12414802819 | ishan singh          |  |   |                  |                              |
| 95 |                        | 9314802819  | ANKITA BASERA        |  |   |                  |                              |

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| 96  | <b>Mr. Priyank Saxena</b>  | 9214802819    | SNEHAL              | DIRECTION<br>DETECTING WEB APP                                      | PO1, PO2, PO3, PO4, PO5,<br>PO6, PO10, PO11, PO12         | PSO1,<br>PSO2          | SDG 4, SDG<br>9, SDG 11             |
| 97  |                            | 12214802819   | UMESH               |   |   |                        |                                     |
| 98  | <b>Ms. Sumedha Gupta</b>   | 7214802819    | Arnab Chowdhury     | Gym dep tracker using<br>mediapipe and open cv                      | PO1, PO2, PO3, PO4, PO5,<br>PO6, PO10, PO11, PO12         | PSO1,<br>PSO2          | SDG 3, SDG<br>4, SDG 9              |
| 99  |                            | 5714802819    | Shouvik Roy         |   |   |                        |                                     |
| 100 |                            | 5814802819    | Paras Verma         | Modeling of juntion less<br>gate All around mosfet                  | PO1, PO2, PO3, PO4, PO5,<br>PO7, PO10, PO12               | PSO1,<br>PSO2          | SDG 9, SDG<br>12                    |
| 101 |                            | 6614802819    | Abhishek Bhagat     |   |   |                        |                                     |
| 102 |                            | 6814802819    | Arya Gopalika       |   |   |                        |                                     |
| 103 | 1614802819                 | Kumar Manglam |                     |   |   |                        |                                     |
| 104 | <b>Mr. Ajay Kr. Garg</b>   | 11514802819   | Paras Karkolia      | Home automation using<br>infrared                                   | PO1, PO2, PO3, PO4, PO5,<br>PO6, PO10, PO11, PO12         | PSO1,<br>PSO2          | SDG 7, SDG<br>9, SDG 11,<br>SDG 12  |
| 105 |                            | 11614802819   | Piyush Gupta        |   |   |                        |                                     |
| 106 |                            | 12814802819   | Shashank Jindal     |   |   |                        |                                     |
| 107 |                            | 12314802819   | Sameer Sagar        | Smart parking System.   | PO1, PO2, PO3, PO4, PO5,<br>PO6, PO7, PO10, PO11,<br>PO12 | PSO1,<br>PSO2          | SDG 9, SDG<br>11, SDG 12,<br>SDG 13 |
| 108 |                            | 14714802819   | Devaryan Vaid       |   |   |                        |                                     |
| 109 |                            | 13814802819   | Umang Gupta         |   |   |                        |                                     |
| 110 | <b>Dr. Himanshu Khanna</b> | 1314807320    | Shivam              | Fake product<br>Identification using<br>Blockchain                  | PO1, PO2, PO3, PO4, PO5,<br>PO6, PO8, PO10, PO11,<br>PO12 | PSO1,<br>PSO2          | SDG 9, SDG<br>12, SDG 16            |
| 111 |                            | 914807320     | Kushagra kumar      |   |   |                        |                                     |
| 112 |                            | 1614807320    | Utkarsh Kumar Patel |   |   |                        |                                     |
| 113 |                            | 12014802819   | Sai Krishna Ramesh  | AGRICULTURE<br>QUADCOPTER   | PO1, PO2, PO3, PO4, PO5,<br>PO6, PO7, PO10, PO11,<br>PO12 | PSO1,<br>PSO2,<br>PSO3 | SDG 2, SDG<br>9, SDG 12,<br>SDG 13  |
| 114 |                            | 5314802819    | Vibhor Dwivedi      |   |   |                        |                                     |
| 115 |                            | 7514802819    | Abhishek Tyagi      |   |   |                        |                                     |
| 116 | <b>Mr. Rohit Lakhane</b>   | 11714802819   | vanshaj jain        | Design and Analysis of<br>UART                                      | PO1, PO2, PO3, PO4, PO5,<br>PO10, PO11, PO12              | PSO1,<br>PSO2          | SDG 9, SDG<br>12                    |
| 117 |                            | 12614802819   | shaurya sadana      |   |   |                        |                                     |
| 118 |                            | 7314802819    | karan behl          |   |   |                        |                                     |
| 119 | <b>Ms. Sanna Gupta</b>     | 4814802819    | Mayank Gupta        | A Web App for<br>Plagiarism Detection for a<br>batch of assignments | PO1, PO2, PO3, PO4, PO5,<br>PO6, PO8, PO10, PO11,<br>PO12 | PSO1,<br>PSO2          | SDG 4, SDG<br>9, SDG 16             |
| 120 |                            | 1714802819    | Piyush Nagpal       |   |   |                        |                                     |
| 121 |                            | 3114802819    | Esha Singh          |   |   |                        |                                     |

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| 122 | <b>Ms. Sapna Gupta</b>  | 614802819   | Manan Mahajan   | Ethical hacking using web scrapping                                       | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO10, PO11, PO12 | PSO1, PSO2 | SDG 9, SDG 16                 |
| 123 |                         | 2614802819  | Abhedya Mishra  |   |   |            |                               |
| 124 |                         | 414802819   | Praveen Kumar   |   |   |            |                               |
| 125 | <b>Mr. Nitish Uppal</b> | 6714802819  | Rahul Sharma    | Energy efficient Wireless Networks  | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO11, PO12 | PSO1, PSO2 | SDG 7, SDG 9, SDG 12, SDG 13  |
| 126 |                         | 8214802819  | Gaurav          |   |   |            |                               |
| 127 |                         | 6414802819  | Rahul Gupta     |   |   |            |                               |
| 128 | <b>Ms. Neeraj</b>       | 6314802819  | Saransh Gupta   | Data communciation using ultrasonic waves                                 | PO1, PO2, PO3, PO4, PO5, PO6, PO10, PO11, PO12      | PSO1, PSO2 | SDG 9, SDG 12                 |
| 129 |                         | 6114802819  | ASHUTOSH JHA    |   |   |            |                               |
| 130 |                         | 114807320   | Akshay Bora     | Iot Based Biometric Attandance System                                     | PO1, PO2, PO3, PO4, PO5, PO6, PO8, PO10, PO11, PO12 | PSO1, PSO2 | SDG 4, SDG 9, SDG 16          |
| 131 |                         | 514807320   | Dharam Singh    |   |   |            |                               |
| 132 |                         | 1014807320  | Nishi kumari    |   |   |            |                               |
| 133 | <b>Dr. S.K. Kundu</b>   | 11014802819 | Mohapatra       | Design of Notched Ultra Wideband Antenna                                  | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO12       | PSO1, PSO2 | SDG 9, SDG 12                 |
| 134 |                         | 10814802819 | Shubham Sharma  |   |   |            |                               |
| 135 |                         | 8414802819  | Ishwaani Batra  | Design of circularly polarized antenna with                               | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO12       | PSO1, PSO2 | SDG 9, SDG 12, SDG 13         |
| 136 |                         | 13714802819 | Namit Sinha     |   |   |            |                               |
| 137 |                         | 4314802819  | Sayan Mukherjee |   |   |            |                               |
| 138 | <b>Mr. Umesh</b>        | 36414802819 | Aaryan singhwal | Design and analysis of inset feed microstrip patch atenna and uwb antenna | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO12       | PSO1, PSO2 | SDG 9, SDG 12, SDG 13         |
| 139 |                         | 36614802810 | Raghav Batra    |   |   |            |                               |
| 140 |                         | 35214802819 | Devanshu Gupta  |   |   |            |                               |
| 141 |                         | 10614802819 | Shagun Kumar    | Design microstrip patch Antenna for S band and 5g Applications            | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO12       | PSO1, PSO2 | SDG 9, SDG 11, SDG 12, SDG 13 |
| 142 |                         | 4314802818  | Laik Singh      |   |   |            |                               |
| 143 |                         | 35614802819 | Rishabh Saini   |   |   |            |                               |
| 144 | <b>Mr. Sudarshan</b>    | 36314802818 | PRADUMN SHUKLA  | Home survellance and security system                                      | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO10        | PSO1, PSO2 | SDG 9, SDG 11, SDG 16         |
| 145 |                         | 45614802818 | BHANDARI (YB)   | Design of pifa antenna array  | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO12       | PSO1, PSO2 | SDG 9, SDG 11, SDG 12         |
| 146 |                         | 11414802819 | Ankit kumar     |   |   |            |                               |
| 147 |                         | 6214802819  | Nikhil Kumar    |   |   |            |                               |

|     |                                  |             |                   |   |   |                        |   |
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| 148 | <b>Dr. A.K. Singh</b>            | 8914802819  | Siddharth Sharma  | Soil moisture Dectection  | PO1, PO2, PO3, PO4, PO5,<br>PO6, PO7, PO10, PO11,<br>PO12 | PSO1,<br>PSO2,<br>PSO3 | SDG 2, SDG<br>6, SDG 9,<br>SDG 12,<br>SDG 13            |
| 149 |                                  | 9514802819  | Mahak Chaudhary   |   |   |                        |   |
| 150 |                                  | 9014802819  | Manas Mishra      |   |   |                        |   |
| 151 |                                  | 314803819   | Raghav Makhija    | SMART WASTE<br>MANAGEMENT<br>SYSTEM   | PO1, PO2, PO3, PO4, PO5,<br>PO6, PO7, PO10, PO11,<br>PO12 | PSO1,<br>PSO2,<br>PSO3 | SDG 3, SDG<br>6, SDG 9,<br>SDG 11,<br>SDG 12,<br>SDG 13 |
| 152 |                                  | 1014802819  | Sourav Jha        |   |   |                        |   |
| 153 |                                  | 8814802819  | Simran Rastogi    | Dual power smart exhaust<br>system  | PO1, PO2, PO3, PO4, PO5,<br>PO6, PO7, PO10, PO11,<br>PO12 | PSO1,<br>PSO2,<br>PSO3 | SDG 5, SDG<br>7, SDG 9,<br>SDG 11,<br>SDG 12,<br>SDG 13 |
| 154 |                                  | 9814802819  | Ashish Mehta      |   |   |                        |   |
| 155 |                                  | 5614802819  | Sangam Choudhary  |   |   |                        |   |
| 156 |                                  | 10914802819 | yash              |   |   |                        |   |
| 157 | <b>Mr. B.K.Singh</b>             | 8614802818  | saumya pandey     | DEVELOPMENT OF AC<br>VOLTAGE/CURRENT  | PO1, PO2, PO3, PO4, PO5,<br>PO10, PO11, PO12              | PSO1,<br>PSO2          | SDG 7, SDG<br>9, SDG 12                                 |
| 158 |                                  | 4714802819  | Drishti Pandey    | Door unlocking system<br>using bolt IOT   | PO1, PO2, PO3, PO4, PO5,<br>PO6, PO7, PO10, PO11,<br>PO12 | PSO1,<br>PSO2,<br>PSO3 | SDG 9, SDG<br>11, SDG 16                                |
| 159 |                                  | 5014802819  | rimzhim goyal     |   |   |                        |   |
| 160 |                                  | 1914802819  | Chaitanya kaistha | Weather monitoring<br>system using Nodemu<br>Board                                    | PO1, PO2, PO3, PO4, PO5,<br>PO6, PO7, PO10, PO11,<br>PO12 | PSO1,<br>PSO2,<br>PSO3 | SDG 3, SDG<br>9, SDG 11,<br>SDG 12,<br>SDG 13           |
| 161 |                                  | 4514802819  | Shubhankar negi   |   |   |                        |   |
| 162 |                                  | 3214802819  | Rishab kashyap    |   |   |                        |   |
| 163 | <b>Ms. Abhilasha<br/>Gokhale</b> | 13514802819 | Chirag Kapoor     | IOT based<br>MONITORING of lab<br>scale constitutive land fill<br>model of food waste | PO1, PO2, PO3, PO4, PO5,<br>PO6, PO7, PO10, PO11,<br>PO12 | PSO1,<br>PSO2,<br>PSO3 | SDG 3, SDG<br>6, SDG 9,<br>SDG 11,<br>SDG 12,<br>SDG 13 |
| 164 |                                  | 12914802819 | Aanchal Gaur      |   |   |                        |   |
| 165 |                                  | 14114802819 | Tusshar Mathur    |   |   |                        |   |
| 166 |                                  | 21814802819 | Parul Kohli       | Surveilance car   | PO1, PO2, PO3, PO4, PO5,<br>PO6, PO7, PO10, PO11,<br>PO12 | PSO1,<br>PSO2,<br>PSO3 | SDG 3, SDG<br>9, SDG 11,<br>SDG 16                      |
| 167 |                                  | 11914802819 | Udyan Ojha        |   |   |                        |   |
| 168 |                                  | 12114802819 | Madhur Pant       |   |   |                        |   |
| 169 | <b>Ms. Preeti Goyal</b>          | 35914802819 | Avi Kumar         | IOT based robotic arm<br>controlled by hand<br>gestures.                              | PO1, PO2, PO3, PO4, PO5,<br>PO6, PO7, PO10, PO11,<br>PO12 | PSO1,<br>PSO2,<br>PSO3 | SDG 3, SDG<br>8, SDG 9,<br>SDG 10,<br>SDG 11            |
| 170 |                                  | 8614802819  | Harshaang Kumar   |   |   |                        |   |
| 171 |                                  | 14914802819 | Harsh Raj         |   |   |                        |   |
| 172 |                                  | 35114807320 | ARJUN TYAGI       | Home survillance and<br>scuritv svstem  | PO1, PO2, PO3, PO4, PO5,<br>PO6, PO7, PO10, PO11,         | PSO1,<br>PSO2,         | SDG 9, SDG<br>11. SDG 16                                |
| 173 |                                  | 36314802818 | Pradumn Shukla    |   |   |                        |   |

|     |                         |             |                    |                         |   |   |                               |  |
|-----|-------------------------|-------------|--------------------|-------------------------|---|---|-------------------------------|--|
| 174 |                         | 21914802819 | Mudita Mudgal      |                         | PO12  | PSO3  |                               |  |
| 175 |                         | 11214802819 | KARTIK SHARMA      | Non invasive Glucometer | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO11, PO12 | PSO1, PSO2, PSO3                                    | SDG 3, SDG 9, SDG 12          |  |
| 176 |                         | 11114802819 | DHRUV JAIN         |                         |   |   |                               |  |
| 177 | <b>Ms. Swati Sharma</b> | 814807320   | Joydev Hati        |                         |   |   |                               | Alcohol sensing alert using IOT with Engine Locking system |
| 178 |                         | 114802819   | Vignesh Singh      |                         |   |   |                               |  |
| 179 |                         | 214802819   | Harshit Khandelwal |                         |   |   |                               |  |
| 180 |                         |             | 35114802819        | Siddharth Redhu         | SMART DOOR LOCK                                     | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO11, PO12 | PSO1, PSO2, PSO3              | SDG 9, SDG 11, SDG 16                                      |
| 181 |                         |             | 35314802819        | Harshit Gupta           |   |   |                               |  |
| 182 |                         |             | 35414802819        | Shraddha Padhy          |   |   |                               |  |
| 183 |                         |             | 1414807320         | Siddharth Kumar Rana    | SMS Spam Detection using Machine Learning           | PO1, PO2, PO3, PO4, PO5, PO10, PO11, PO12           | PSO1, PSO2, PSO3              | SDG 9, SDG 16  |
| 184 | <b>Mr. Vaibhav</b>      | 8114802819  | Naman Malik        | Medi Robot              | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO11, PO12 | PSO1, PSO2, PSO3                                    | SDG 3, SDG 8, SDG 9, SDG 11   |  |
| 185 |                         | 4414802819  | Jasmeet Singh      |                         |   |   |                               |  |
| 186 |                         |             | 36814802819        | Riddhi Prasad           | DUAL AXIS SOLAR TRACKER                             | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO11, PO12 | PSO1, PSO2, PSO3              | SDG 7, SDG 9, SDG 11, SDG 13                               |
| 187 |                         |             | 35214807320        | yash pandit             | Design Of a Wireless Mobile Charger                 | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO11, PO12 | PSO1, PSO2, PSO3              | SDG 7, SDG 9, SDG 12                                       |
| 188 |                         |             | 33148024810        | Pawan Kumar             | BITCOIN PRICE PREDICTION AND RECOMMENDATION SYSTEM  | PO1, PO2, PO3, PO4, PO5, PO10, PO11, PO12           | PSO1, PSO2, PSO3              | SDG 8, SDG 9   |
| 189 |                         |             | 2114802819         | Sreejak Bhuniya         | WEATHER MONITOR AND VISITOR COUNTER WITH AUTOMATION | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO11, PO12 | PSO1, PSO2, PSO3              | SDG 3, SDG 9, SDG 11, SDG 13                               |
| 190 |                         |             | 1814802819         | Aakash Raj              | YOGA POSTURE RECOGNITION                            | PO1, PO2, PO3, PO4, PO5, PO6, PO10, PO11, PO12      | PSO1, PSO2, PSO3              | SDG 3, SDG 4, SDG 9  |
| 191 |                         | 3614802819  | Aniketh Varma      |                         |   |   |                               |  |
| 192 |                         | 4014802819  | Pranshu Srivastava |                         |   |   |                               |  |
| 193 |                         | 1114807320  | Pankaj Singh       | KRISHI DRONE            | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO11, PO12 | PSO1, PSO2, PSO3                                    | SDG 2, SDG 9, SDG 11, SDG 12, |  |
| 194 |                         | 1214807320  | Sanjay Gupta       |                         |   |   |                               |  |
| 195 |                         | 1514807320  | Tanuj Rawat        |                         |   |   |                               |  |

|     |                       |             |                |                                      |   |                  |                              |
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| 196 | <b>Dr. Rohit Rana</b> | 21014802819 | Geetika Verma  | Quadcopter done and its Applications | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO11, PO12 | PSO1, PSO2, PSO3 | SDG 2, SDG 9, SDG 11, SDG 13 |
| 197 |                       | 4114802819  | Aditya Chauhan |                                      |   |                  |                              |
| 198 |                       | 20414802819 | Mohammad Mueez | Visibility Distance detection        | PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO10, PO11, PO12 | PSO1, PSO2, PSO3 | SDG 3, SDG 9, SDG 11         |
| 199 |                       | 7714802819  | kunaL Batra    |                                      |   |                  |                              |