

<b>PRODUCT ID</b>	<b>NAME OF INNOVATION PRODUCT</b>	<b>MEDAL</b>
IA-16	IMPEDANCE BASED E. COLI SENSOR	GOLD
IA-17	SIGN LANGUAGE REAL-TIME COMMUNICATOR FOR SPEECH IMPAIRMENT PEOPLE	GOLD
IA-18	SAFE, INEXPENSIVE AND SUSTAINABLE ENERGY STORAGE TECHNOLOGY OF SODIUM-ION BATTERIES	GOLD
IA-19	PORTABLE ALL-OPTICAL RADIO FREQUENCY (AORF) SIGNAL GENERATOR	GOLD
IA-23	DESIGN RASPBERRY PI CONTROLLED SWITCH MODE FOR BATTERY CHARGER	GOLD
IA-27	IOT BASED SMART WASTE BIN MONITORING SYSTEM	GOLD
IA-28	ENERGY-BASED FEATURE EXTRACTION FOR INCIPIENT STAGE OF ARCING FAULT IDENTIFICATION	GOLD
IA-31	SMART IOT BASED FLASH FLOOD MONITORING SYSTEM	GOLD
IA-38	SOLAR POWER CCTV CAMERA	GOLD
IA-4	WATER QUALITY MONITORING SYSTEM (WQMS) VIA MOBILE APPS FOR ORNAMENTAL FISH POND	GOLD
IA-41	COLLABORATIVE AUGMENTED REALITY ASSEMBLY TRAINING APPLICATION (CARATA)	GOLD
IA-44	TITANIUM DIOXIDE PH SENSOR PREPARED BY ELECTROHYDRODYNAMIC ELECTROSPRAYING PROCESS	GOLD
IA-56i	HELPING THE BLIND TO GET THROUGH COVID-19: SOCIAL DISTANCING ASSISTANT	GOLD
IA-57i	SOCIAL DISTANCING CROWD MANAGEMENT SYSTEM	GOLD
IA-63i	PORTABLE PROXIMITY DEVICE	GOLD
IA-65i	THIRD EYE FOR THE BLIND	GOLD
IA-66i	SAFETY JACKET FOR KIDS	GOLD
IA-72i	IOT BASED SMART HELMET SYSTEM FOR ACCIDENT DETECTION	GOLD
IA-74i	AUTOMATED WATER PUMP FOR OVERFLOOD AND OVERFLOW CONTROL	GOLD
IB-14	AUTOMATED MEDICINE DISPENSER MACHINE (AMDM)	GOLD
IB-15	INNOVATIVE WIRELESS SAFETY VEST	GOLD
IB-19	OMNI: TOOTHBRUSH DESIGN FOR DOWN SYNDROME CHILDREN	GOLD
IB-24	GPR ROADSCAN: PORTABLE MOUNTING SYSTEM	GOLD
IB-27	SMART FACE SURVEILLANCE CAMERA (SFSC)	GOLD
IB-31	HULL PEH: A NOVEL COMPRESSIVE AMPLIFIER STRUCTURE FOR PIEZOELECTRIC ENERGY HARVESTING	GOLD
IB-32	FORMULATION & OPTIMIZATION OF CORE SANDWICH PANEL FOR STRUCTURAL INTEGRITY ENHANCEMENT	GOLD
IB-36	SOLAR PORTABLE ROSTRUM SYSTEM	GOLD
IB-37	SELF TUNING CONTROLLER FOR VIBRATION SUPPRESSION OF HORIZONTAL FLEXIBLE PLATE	GOLD
IB-42	DRILL BIT SHARPENING MACHINE FOR EDUCATION	GOLD
IB-43	DC SMART ECM	GOLD

IB-8	THREE-DIMENSIONAL PRINTED STINGLESS BEE HIVE BOX	GOLD
IC-10	ENHANCED HOTSPOT MAPS OF TB, MALAYSIA	GOLD
IC-20	ARCHIMEDEAN NANOMIP SENSOR: A PROGNOSTIC DEVICE FOR CLOTTING DISEASE DETECTION	GOLD
IC-26	GSM PATIENT HEARTBEAT MONITORING SYSTEM	GOLD
IC-4	SPEEDDNA ISOLATION KIT	GOLD
IC-6	ICOMP BAG	GOLD
IC-7	MASSAGE BAR ADDED WITH WATERMELON SKIN EXTRACT & MINT (COOL-LIT WATERMELON MASSAGE BAR)	GOLD
ID-10	ULTRA-SENSITIVE HUMIDITY SENSOR CONSTRUCTED USING A NOVEL NANOPOROUS NICKEL OXIDE/ZINC OXIDE NANOCOMPOSITE FILM FOR RAPID HUMIDITY CONTROL	GOLD
ID-1	MAGNETORHEOLOGICAL ELASTOMER ENGINE MOUNT	GOLD
ID-11	GREEN ECO PECS NURSERY POLYBAG	GOLD
ID-12	LOW COST BIOGENIC NANOPARTICLES FOR WASTEWATER TREATMENT	GOLD
ID-13	ZSHIELD: A NOVEL ELECTROMAGNETIC RADIATION GRADED Z- SHIELDING MATERIAL FROM POLYMERIC WASTE MATERIAL	GOLD
ID-14	HPACKED: RECHARGEABLE HYDROGEN STORAGE FOR LIGHT DUTY VEHICLES	GOLD
ID-2	MODIFIED GHEE/CLARIFIED BUTTER COMPOSITION FOR FOOD TECHNOLOGY	GOLD
ID-4	HIGHLY SENSITIVE NIOBIUM-DOPED TITANIA NANOTUBES ARRAY HUMIDITY SENSOR SYNTHESIZED VIA ELECTROCHEMICAL DEPOSITION APPROACH	GOLD
ID-5	RZNO-FHS01: NOVEL PAPER-BASED COMPOSITE HUMIDITY SENSOR BASED ON SUPERLATIVE POLYCRYSTALLINE NANOSTRUCTURED ZNO POWDER AND REDUCED GRAPHENE OXIDE	GOLD
ID-7	AUGMENTATION OF POWER CONVERSION EFFICIENCY OF HYBRID SOLAR CELLS BY UTILISING VERTICALLY ALIGNED ZAO NANOWIRES AS PHOTOANODE VIA NOVEL MICROWAVE-ASSISTED SONICATION APPROACH	GOLD
ID-8	FABRICATION OF HYBRID SOLAR CELL BASED ON NOVEL RAMIFICATION PROCESS OF VERTICALLY ALIGNED ZAO NANOROD ARRAYS	GOLD
ID-9	RIZBRUNANA: FROM WASTE TO HEALTHY HIGH FIBRE BISCUIT	GOLD
IE-1	REFORMED POLYIMIDE/NANOCRYSTALLINE CELLULOSE FOR GAS SEPARATION	GOLD
IE-10	MAGSORB FOR EFFICIENT WASTEWATER TREATMENT DURING COVID-19 PANDEMIC	GOLD
IE-15	DEVELOP OF PIEZOELECTRIC RAINDROP ENERGY HARVESTER	GOLD
IE-19	HYBRID SOLAR AGRICULTURAL PUMPING SYSTEM	GOLD

IE-25	NEW INVINCIBLE STINGLESS BEE HIVE DESIGN WITH IOT MONITORING SYSTEM	GOLD
IE-29i	IOT BASED SMART AGRICULTURE MONITORING SYSTEM	GOLD
IE-3	MAGCELLANT: AN ENGINEERED MAGNETIC FLOCCULANT FOR PALM OIL WASTEWATER TREATMENT	GOLD
IE-4	SATELLITE SHALLOW WATER MAPPING SOLUTION (S2WMS)	GOLD
IF-15	E-NOTE HYDRO FLUID DIGITAL (E-HFD)	GOLD
IF-16	DIFFERENTIATION TOPIC IN B-GEO MODULE	GOLD
IF-17	A NEW FRAMEWORK OF SOCIAL FACTORS AND WAQF FUND TO IMPROVE ELDERLY WELL-BEING IN MALAYSIA	GOLD
IF-18	A NEW FRAMEWORK OF SOCIAL COGNITIVE, ADAPTABILITY AND MENTAL HEALTH OF YOUNG PROFESSIONALS IN THE BANKING SECTOR	GOLD
IF-20	INMOSD (INTEGRATED MODEL OF SPIRITUAL DEVELOPMENT FOR ENGINEERING SUBJECTS)	GOLD
IF-21	PATRIOTISM: THE NEW INTEGRATION MODEL OF HUMAN DIMENSIONS WITH MILITARY MINDS AMONG MALAYSIAN ARMED FORCES	GOLD
IF-22	XPLORASI3D	GOLD
IF-24	INOVASI I2K	GOLD
IF-27	ATOM : CLICK & MATHSUP	GOLD
IF-28	HANDS ON SIMULATION FOR IMPROVING REMOTE TEACHING CLASS EXPERIENCE FOR 1ST YEAR ELECTRICAL ENGINEERING STUDENT	GOLD
IF-30	LEARNING IONIC FORMULA USING GAME CARDS	GOLD
IF-32	MANAGEMENT SYSTEM FOR SCHOOL STUDENTS' ATTENDANCE DURING COVID-19 PANDEMIC WITH IOT BASED	GOLD
IF-33	E-LEARNING KIDS MOBILE APPLICATION	GOLD
IF-34	BEGMETODE MATAKU 20/20	GOLD
IF-35	SMART MULTIPLY V2	GOLD
IF-37	'JODOH SNAP' METHOD IN COLLECTIVE NOUNS FOR PRIMARY SCHOOL	GOLD
IF-38	ZEST WITH VOCAB	GOLD
IF-4	MOON PHASES CLOCK	GOLD
IF-42	PSEUDOKIT 4.0: LIVE RESPONSE	GOLD
IF-45	ADVANCED TECHNOLOGY ASSISTED LEARNING SOFTWARE FOR MECHANIC DYNAMICS	GOLD
IF-46	N-KEY 2.0	GOLD
IF-55	TWEETBE: AN INTERACTIVE TECHNICAL ENGLISH WEB SCIENCE THEME BASED FOR STEM LEARNING	GOLD
IF-58	LOCATION BASED SMART ATTENDANCE SYSTEM FOR FLEXIBLE WORKING LIFESTYLE	GOLD
IF-6	BASIC CARD GAME : AN ENTRÉE TO ACCOUNTING	GOLD
IF-60	SITTIGHT	GOLD
IF-62	COMPUTER AIDED LEARNING (CAL) SOFTWARE FOR GEOGRAPHY	GOLD

IF-65	AKADEMI YOUTUBER APPS (AYU APPS)	GOLD
IF-67	MEDIATION EFFECT OF DEBT BEHAVIOUR ON MALAYSIAN EMPLOYEES' FINANCIAL STRAIN MODERATED BY JOB SATISFACTION	GOLD
IF-70	INCLIRULER	GOLD
IF-73	SAMBAL TOTOQ ROSELLE	GOLD
IF-79	MOBILE-BASED AUGMENTED REALITY LECTURER ASSISTANT (MARLA)	GOLD
IF-84	ADJECTIVE MONSTERS KIT: A NOVEL TEACHING TOOL IN IMPROVING THE MASTERY OF COMPARATIVE AND SUPERLATIVE ADJECTIVES	GOLD
IF-86	GATED ENTRY MANAGEMENT (GEM)	GOLD
IF-87	WEB-BASED ATTENDANCE MANAGEMENT SYSTEM WITH GEOLOCATION MAPPING TECHNOLOGY TO SUPPORT THE WORK FROM HOME POLICY DURING COVID-19 PANDEMIC	GOLD
IA-20	APC-BUS: AUTOMATED PASSENGER COUNTING FOR MONITORING AND INTELLIGENT BUS TRANSPORTATION SYSTEM	SILVER
IA-25	SPY & SURVEILLANCE ROBOT CAR	SILVER
IA-26	COLOUR BASED OBJECT TRACKING ROBOT	SILVER
IA-3	WATER QUALITY MONITORING SYSTEM (WQMS) WITH DATA LOGGER FOR AROWANA POND	SILVER
IA-30	REAL-TIME MONITORING PREDICTIVE MAINTENANCE SYSTEM OF INFANT INTENSIVE PHOTOTHERAPY LAMP	SILVER
IA-32	POLARIZATION EFFECT ON THE PERFORMANCE OF MULTIWAVELENGTH FIBER LASER BASED ON SEMICONDUCTOR OPTICAL AMPLIFIERS	SILVER
IA-33	SMART AVR 2.0	SILVER
IA-36	TSBM-19	SILVER
IA-37	LINE DETECTION AND MONITORING SYSTEM IN WOODBALL SPORT	SILVER
IA-39	MICROWAVE SENSOR FOR WATER QUALITY MEASUREMENT	SILVER
IA-42	AUTOMATIC FAULT DIAGNOSIS SYSTEM FOR ELECTRIC MOTORS	SILVER
IA-46	A CASCADE HYPERBOLIC RECOGNITION USING HYBRID FEATURE EXTRACTION IN SUBSURFACE MAPPING	SILVER
IA-48	VISION BASED SMART GRIPPER FOR MATERIAL HANDLING USING INTERNET OF THINGS	SILVER
IA-49	SURVEILLANCE DRONE SYSTEM BASED INTERNET OF THINGS (IOT) FOR INDUSTRIAL SECURITY APPLICATION	SILVER
IA-50	IOT BASED SMART HOME	SILVER
IA-51	THE EYE : HUMAN SAFETY INTEGRATED SYSTEM USING IOT	SILVER
IA-52	GSM BASED SMART ENERGY METER	SILVER
IA-53i	ONLINE CLASS MONITOR SYSTEM	SILVER

IA-54i	ECO-BAT	SILVER
IA-58i	ABL (ANTI BIN LEFTOVER BATTERY)	SILVER
IA-67i	AUTONOMOUS CAR PARKING SYSTEM	SILVER
IA-7	A LOCALISATION OF MOISTURE DISTRIBUTION IN RICE VIA RF SIGNAL ASSISTED BY MAPPING IMAGE	SILVER
IA-70i	IOT BASED SMART MIRROR	SILVER
IA-71i	AN ENHANCED SELF GUIDANCE SMART STICK FOR A VISUALLY IMPAIRED PERSON	SILVER
IA-73i	IOT BASED PESTICIDES MONITORING SYSTEM IN FOOD PRODUCTS	SILVER
IA-8	S-BEE (DESIGN OF IOT-BASED STINGLESS BEE FOR MONITORING SYSTEM)	SILVER
IB-1	SAFETY TESTING OF AUTONOMOUS VEHICLE USING VEHICLE DRIVING PLATFORM FOR MALAYSIAN ENVIRONMENT	SILVER
IB-11	SMART CASHIER	SILVER
IB-18i	SMART GLASS BOTTLE MOLDING AND FILLING OPERATION USING MODULAR PLC	SILVER
IB-2	ULTRAVIOLET GERMICIDAL IRRADIATION (UVGI) DEVICE TO DISINFECT SURFACE AND AIRBORNE PATHOGENS.	SILVER
IB-20	DESIGN A POKO YOKE JIG TO IMPROVE STATIONARY SPOT WELDING (SSW) QUALITY FOR AUTOMOTIVE CHILD PARTS	SILVER
IB-28	VEHICULAR HEATSTROKE SENSOR DEVICE VHSD	SILVER
IB-29	MODELLING THE ENERGY EXTRACTION FROM LOW-VELOCITY STREAM WATER BY SMALL SCALE ARCHIMEDES SCREW TURBINE	SILVER
IB-34	ESTABLISHMENT OF RISK ALGORITHM FOR FATIGUE LIFE CRITERION (RAFL)	SILVER
IB-35	COMPUTATIONAL PROCEDURE FOR DETECTING THE PIPELINE IRREGULARITIES	SILVER
IB-4	HIGH SHREDDING POWER MACHINE FOR AGRICULTURAL WASTE TO FIBRE PROCESSING	SILVER
IB-40	OPTIMIZED MSMC FOR POSITION CONTROL OF INDUSTRIAL ELECTRO-HYDRAULIC ACTUATOR (EHA)	SILVER
IB-41	SMART TRACKING SYSTEM (STS)	SILVER
IB-46i	MODERNIZATION OF AUTOMATED GUIDED VEHICLE BY USING ULTRASONIC SENSOR AND RFID TECHNOLOGIES	SILVER
IB-49i	DESIGN AND FABRICATION OF HYBRID ELECTRIC SCOOTER	SILVER
IB-5	UTM-SHAFT: AN INNOVATIVE FLOATING TURBINE	SILVER
IB-51i	DOMESTIC SEWAGE CLEANING MACHINE	SILVER
IB-53i	AUTOMATIC LIGHT EMITTING DIODE FOG LAMP FOR HIGH EFFICIENCY VECHICULAR SYSTEM	SILVER
IB-6	KNOCK-KNOCK SESAME	SILVER
IB-7	BRIDGTEST	SILVER

IC-12	PORTABLE VACUUM DRESSING DEVICE (PVDD) FOR HOME TREATMENT	SILVER
IC-13i	BIOMEDICAL WASTE MANAGEMENT AND RECYCLING METHOD FOR HOSPITAL USING IOT	SILVER
IC-15i	A REAL TIME HUMAN POSTURE DETECTION FOR VIRTUAL ENVIRONMENT	SILVER
IC-18	GENIUSWCHAIR	SILVER
IC-2	IHELP-EXP	SILVER
IC-23	A PERSONALISED GLYCAEMIC CONTROL FOR MALAYSIAN ICU DIABETIC PATIENTS.	SILVER
IC-24	XYLOSWEET	SILVER
IC-25	AUTOMATED COLONY COUNTER (CFU) WITH TRACEABLE ORIGIN OF SAMPLING DATA	SILVER
IC-27	I-CHECK: A LOW-COST HEALTH CHECKER USING ARDUINO	SILVER
IC-28	A METHOD FOR DISTINGUISHING COVID-19 THROUGH CHEST RADIOGRAPH USING AI TECHNIQUES	SILVER
IC-29	GEMPAQ (GETTING EVERY SMOKER TO PARTICIPATE AND QUIT SMOKING) - MOBILE APPS FOR SMOKING CESSATION	SILVER
IC-31i	NOVEL CHEMICAL ANALYZER FOR DIFFERENTIATING REAL AND ARTIFICIALLY MOULDED FINGERPRINTS	SILVER
IC-9	NOMINATION OF QUARANTINE FACILITIES VIA DIGITAL SOLUTION	SILVER
ID-20	ANTISTATPAK	SILVER
ID-3	SALUTAN SWA SEMBUH - KAPSUL MINYAK RAMI	SILVER
IE-11	MANGO PLANT HEALTH EVALUATION USING MACHINE VISION UTILIZING NDVI IMAGES	SILVER
IE-12	AUTOMATED WATER QUALITY MONITORING & CONTROL SYSTEM FOR HYDROPONICS APPLICATION	SILVER
IE-13	E-PROSUMER: SMART PRECISION FERTIGATION SYSTEM	SILVER
IE-14	FINITE DIFFERENCE TIME DOMAIN METHOD (FDTD) MODELING OF UNDERGROUND WATER PIPELINE FOR LEAKAGE DETECTION	SILVER
IE-16	OIL PALM FROND FIBER WASTEWATER FILTER IN PALM OIL MILL EFFLUENT TREATMENT	SILVER
IE-17	O' FILTERZ	SILVER
IE-18	SCIENTIFIC ECO-AGRO TOURISM MODEL IN MERAPOH, PAHANG	SILVER
IE-2	HIGH ORDER IMPLICIT NUMERICAL SCHEME FOR ATMOSPHERIC CHEMICAL KINETIC EQUATIONS	SILVER
IE-20	DRONE PAYLOAD AIR QUALITY MEASUREMENT DEVICE (D-PAQ)	SILVER
IE-24	ACQAMON : AQUAFARMING WATER QUALITY MONITORING USING MULTI-SENSORY SYSTEM	SILVER
IE-28i	AUTOMATIC WEED PLANT REMOVAL SYSTEM	SILVER
IE-5	CHICHIMAU	SILVER
IE-9	EXPERIMENTAL STUDY ON COFFEE HUSK AS PARTIAL REPLACEMENT OF FINE AGGREGATE IN CONCRETE WALKWAY	SILVER

IF-1	IFITTKIDS MODULE	SILVER
IF-10	ELECTRONIC CIRCUIT TRAINER	SILVER
IF-11	REV-LAB: REACTION ENGINEERING VIRTUAL LAB	SILVER
IF-13	VR EDUTAINMENT FOR EXPERIENTIAL ACTIVE LEARNING (V-REAL)	SILVER
IF-14	MATRIX MAGIC CUBE	SILVER
IF-19	QOTD: A STUDENT-TEACHER REFLECTION KIT IN ODL	SILVER
IF-2	HOME LEARNING TOOL KITS FOR SPECIAL NEEDS STUDENTS	SILVER
IF-29	HANI- JOM LIHAT GAMBAR	SILVER
IF-36	EDUCOMIC TANI	SILVER
IF-40	WIZER INTERACTIVE LEARNING: COUNTABLE AND UNCOUNTABLE NOUNS	SILVER
IF-43	FUND FOR FOOD: FOOD PANTRY COMPLETE GUIDE TO HELP FIGHT HUNGER ON CAMPUS	SILVER
IF-44	KELOPAK PENTAGON KPS	SILVER
IF-48	MUDAH.CS2	SILVER
IF-51	ENGAGING STUDENTS IN LEARNING MATHEMATICS THROUGH VIRTUAL REALITY (VR)	SILVER
IF-53	NEW APPROACH TO CULTURE AND HERITAGE PROGRAM	SILVER
IF-56	MY VOCAB BLIPPAR PUZZLE BLOCK	SILVER
IF-57	KEEP YOUR VOICE	SILVER
IF-59	DESIGN OF MOBILE APPS TEXTBOOK (WITH CLOUD BASED SYSTEM) WITHOUT USING E-PUB FORMAT TO SUPPORT THE NEEDS OF SMARTPHONE OWNED BY B40	SILVER
IF-61	E-KOKU SRISKU	SILVER
IF-63	DIGITAL CULTURAL HERITAGE LEARNING SOFTWARE FOR ' WAYANG KULIT'	SILVER
IF-64	HERBAL FACE MASK WITH MODERN BATIK DESIGN	SILVER
IF-68	ZERO TO HERO: MUDAHNYA POWERPOINT DAN CANVA	SILVER
IF-69	CODING EDUCATIONAL GAMES FOR KIDS	SILVER
IF-72	ONLINE CLASS ATTENDANCE RECORD FORM WEBSITE	SILVER
IF-74	DESIGNING AND DEVELOPING YEAR ONE SCIENCE PEDAGOGICAL MODULE USING STEAM EDUCATION	SILVER
IF-75	BIO PUPPET SHOW	SILVER
IF-77	ZOOLOGY VENTURES	SILVER
IF-78	KIPEM - KIPAS PEMBEZAAN MATRIKULASI	SILVER
IF-85	CHATMATE	SILVER
IF-88	TETINGKAP MOKK	SILVER
IF-9	EPHYSICS INTERACTIVE LEARNING (EPIL)	SILVER
IA-14	CYCAL	BRONZE
IA-15	COVITAL - IOT BASED REAL-TIME COVID-19 PATIENT HEALTH MONITORING SYSTEM	BRONZE
IA-22	SECURITY AND SMART FEEDING SYSTEM & DEVELOPMENT FISH FARM MONITORING APPS	BRONZE
IA-24	ENERGY EFFICIENT CONVERTER BASED ELECTRIC VEHICLE BATTERY CHARGERS	BRONZE

IA-29	HYBRID COOLING SYSTEM FOR SOLAR PV MODULES	BRONZE
IA-34	IMPLEMENTATION OF A SMARTPHONE CHARGING SYSTEM USING RFID	BRONZE
IA-40	MULTIWAVELENGTH FIBER LASER BASED ON LYOT FILTER ASSISTED BY RAYLEIGH BACKSCATTERING	BRONZE
IA-45	IOT BASED DOOR SECURITY ALARM USING BLYNK	BRONZE
IA-47	SECURITY SYSTEM AND ACCESS CONTROL WITH ARDUINO AND RFID	BRONZE
IA-55i	A NOVEL E-LEARNING CONTENT FOR FUTURE DEVELOPMENT	BRONZE
IA-59i	ANTIBACTERIAL AND ANTIVIRAL FUNCTIONING ORGANIC MATERIALS TOWARDS TACKLING COVID-19	BRONZE
IA-60i	FEILD IRRIGATION SYSTEM	BRONZE
IA-61i	IOT BASED SMART WASTE MANAGEMENT SYSTEM	BRONZE
IA-62i	BLIND SPOT DETECTION ON HEADLIGHTS	BRONZE
IA-64i	INTELLIGENT UMBRELLA	BRONZE
IA-68i	AUTO TEMPERATURE DETECTOR IN ENTRANCE FOR COVID SAFETY	BRONZE
IA-69i	SUSPECT DETECTOR	BRONZE
IA-77i	SMART MONITORING OF FOOD WAREHOUSES	BRONZE
IA-79i	AI-AUGMENTED BEHAVIOR ANALYSIS FOR CHILDREN WITH AUTISM: A TECHNOLOGY FOR FUTURE DIAGNOSTICS	BRONZE
IA-81i	IOT BASED AUTOMATED PARALYSIS PATIENT HEALTH CARE SYSTEM DURING COVID 19 PANDEMIC SITUATION	BRONZE
IB-30	A WASTE INCINERATOR PROTOTYPE FOR ENERGY GENERATION SYSTEM	BRONZE
IB-33	PORTABLE ROLLER BENDING MACHINE	BRONZE
IB-38	DESIGN AND ANALYSIS OF FLOUR SIEVING MACHINE PROTOTYPE USING AUTODESK INVENTOR SIMULATION	BRONZE
IB-47i	DESIGN AND IMPLEMENTATION OF AUTOMATIC HEADLIGHT DIMMER FOR TWO WHEELERS USING ARDUINO CONTROLLER	BRONZE
IB-48i	DESIGN AND FABRICATION OF ELECTRIC MOTORCYCLE	BRONZE
IB-50i	REAL TIME FACE RECOGNITION SURVEILLANCE DRONE	BRONZE
IC-14i	DIABETIC FOOT ULCER DETECTION AND HEALING METHODS USING DEEP LEARNING NEURAL NETWORKING	BRONZE
IC-16i	IOT BASED DIALYSIS PATIENT MONITORING SYSTEM	BRONZE
IC-17i	EFFICIENT BODY PAIN RELIEVER SYSTEM	BRONZE
IC-19	DEEP CONVOLUTIONAL GENERATIVE ADVERSARIAL NETWORK FOR DIABETIC RETINOPATHY	BRONZE
IC-22i	AUTOMATED ANESTHESIA CONTROL SYSTEM USING LABVIEW	BRONZE
IC-3	ANTIBACTERIAL FABRIC	BRONZE
IC-30	CLOVES HONEY PASTILLES	BRONZE



ID-15	DURIOSEEDSACCHARINE™:AS FUTURE SUGARS RESOURCES	BRONZE
ID-16	REAL-TIME TEMPERATURE LOGGER FOR COLD FOOD DELIVERY LOGISTICS	BRONZE
ID-19	POLYVASOL POLYVINYL ALCOHOL/CASSAVA STARCH DISSOLVABLE	BRONZE
IE-21	ECO ZNO/SBR: FLOATING PHOTOCATALYST FOR DYE REMOVAL	BRONZE
IE-22	A PROTOTYPE OF FLOOD RISK REDUCTION GUIDELINE FOR COMMUNITY IN KOTA BHARU FLOODPLAIN, KELANTAN.	BRONZE
IE-26i	SUSTAINABLE BUILDING MATERIALS	BRONZE
IE-27i	WEALTH FROM WASTE	BRONZE
IE-30i	SMART GARDENING SYSTEM USING IOT	BRONZE
IF-3	MD LEGO	BRONZE
IF-39	TSSP MEASUREMENT MODEL	BRONZE
IF-41	TAKE 10 KICK 1	BRONZE
IF-50	NU-TECH STEM MODULE	BRONZE
IF-54	MYLINK PVMA SMANSOR	BRONZE
IF-71	E-HADIR PDPR SYSTEM	BRONZE
IA-75i	AUTONOMOUS BUILDING MANAGEMENT SYSTEM	BRONZE
IA-80i	TRAFFIC CONTROL MANAGEMENT USING BARCODE SENORS	BRONZE
IB-12	MODELING AND CONTROLLER DESIGN FOR ELECTRO-HYDRAULIC ACTUATOR (EHA) SYSTEM	BRONZE
IB-13	OPTIMIZATION OF PID CONTROLLER FOR ELECTRO-HYDRAULIC SYSTEM USING PARTICLE SWARM OPTIMIZATION	BRONZE
IB-45i	SEMI-AUTOMATIC SOWING MACHINE	BRONZE
IB-52i	ADAPTIVE CRUISE CONTROL FOR INTELLIGENT VEHICULAR FLOW USING ARDUINO	BRONZE